	GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.	
OM nucleic - nuc	OM nucleic - nucleic search, using sw model	٠
Run on:	April 24, 2005, 07:21:03; Search time 1738 Seconds (without alignments) 1784.312 Million cell updates/sec	
Title: Perfect score: Sequence:	US-10-663-418-71 : 64 tcatgacctcattttaggacttgttagcttttctctaga 64	•
Scoring table:	: IDENTITY NUC Gapop 10.0 , Gapext 1.0	
Searched:	4708233 segs, 24227607955 residues	
Total number of	Total number of hits satisfying chosen parameters: 9416466	
Minimum DB seg] Maximum DB seg]	Minimum DB seq length: 0 Maximum DB seq length: 2000000000	
Post-processing	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	
Database :	GenEmbl:* 1: gb_ba:*	

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

gb_pl: jb pat Ë

SUMMARIES

Mus muscu AL671759 Mouse DNA Mus muscu AC111774 Rattus no Ношо варі Seguence Description AR199533 S AR374685 S AR409320 S AL049795 AR409342 AR199533 AR374685 AR409320 Query Match Length DB 00.0 245095 Score 45. 45. Result

Bapi

39.2 61.3 4697 6 AR374688 AR409323 39.2 61.3 4697 6 AR374688 AR409323 39.2 61.3 4697 6 AR374688 AR409323 31.48.4 204697 2 AC120995 31.48.4 204697 2 AC122571 AC120995 31.48.4 204697 2 AC122571 AC120995 30.6 46.2 229213 10 AL772138 AC1224657 46.3 133265 10 AL13575 AC124657 29.4 45.3 132657 10 AL13575 AC124657 45.3 12667 10 AL13575 AC124657 45.3 12667 10 AL13575 AC124657 29.4 45.3 220407 2 AC118154 AC118154 45.3 220407 2 AC118154 AC118154 45.3 320407 2 AC121626 AC106583 28.6 44.7 170788 2 AC13387 AC13256 44.7 334320 2 AC13256 AC13256 28.4 44.4 183090 2 AC121755 AC106589 28.4 44.4 183090 2 AC12175 AC106591 28.4 44.4 183090 2 AC121775 AC108094 28.4 44.4 183090 2 AC121775 AC108094 28.6 44.7 34326 2 AC121775 AC108094 AC108094 AC108094	39.2 61.3 4697 6 AR3195318 ARX2933 Sequence 39.2 61.3 4697 6 AR409323 Bequence 39.2 61.3 4697 2 AC120995 AC120995 Rattus 30 46.9 155580 2 AC112571 AC120995 Rattus 30 46.9 155580 2 AC118845 AC112571 Rattus 29.4 46.9 133265 10 AL954355 AC118845	220	41.4	64.7		φφι	AX239571 BD056447	
39.2 61.3 4697 6 AR409323 AR409323 Sequence 51.3 4697 6 AR209574 AR209574 Sequence 51.3 4697 6 AR209574 AR209574 Sequence 51.3 4697 6 AR2095574 BD056450 Novel 1 B9.2 204.2 1 8056450 Novel 1 B9.2 204.2 1 8056450 Novel 2 ACI12871 ACI12895 Rattus 29.6 61.9 155580 2 ACI128571 ACI18845 ACI12871 Rattus 29.6 51824 10 AL712138 Mouse ACI12867 Mus mu ACI22667 ACI22668 ACI23628 ACI2368 ACI2368 ACI2368 ACI2368 ACI2368 ACI22175 Rattus 28.4 44.4 182399 2 ACI22888 ACI22175 Rattus 28.4 44.4 182399 2 ACI22888 ACI22175 Rattus 28.4 44.4 182399 2 ACI22888 ACI22175 Rattus 28.4 44.4 183399 2 ACI22888 ACI22175 Rattus 28.4 44.4 183399 2 ACI22888 ACI22175 Rattus 28.4 44.4 183399 2 ACI22888 ACI22175 Rattus 28.4 44.4 196332 2 ACI22888 Homo sa ACI22175 ACI22888 Homo sa ACI22888 Homo sa ACI22175 ACI22888 ACI22175 ACI22888 ACI22175 ACI22888 ACI22175 ACI22888 ACI222888 ACI22175 ACI22888 ACI22288 ACI22175 ACI22888 ACI222888 ACI22275 ACI22888 ACI22275 ACI22288	39.2 61.3 4697 6 AR409323 AR409333 AR409333 AR409333 AR409333 AR409333 AR409333 AR339574 AR33957	2.5	39.5	61.3		<u>ب</u> م	AR199536 AR374688	
39.2 61.3 4697 6 AX339574 AX239574 Sequence 61.3 4697 6 BD056450 Novel 180.026650 Novel 180.026695 Rattus 31 48.4 236070 2 ACI12571 ACI12695 Rattus 46.9 15580 2 ACI12671 ACI12695 Rattus 46.9 15580 2 ACI12671 ACI12695 Rattus 46.9 15580 2 ACI12671 ACI12695 Rattus ACI26580 2 ACI12671 Rattus 45.3 13265 10 ALJ54355 ACI2657 Mus muse 45.3 13265 10 ALJ54355 ACI2656 Muse 29 45.3 13265 10 ALJ54355 ACI18154 Rattus 45.3 220407 2 ACI18154 ACI18154 Rattus 29 45.3 233944 2 ACI1626 ACI16568 ACI16568 Rattus 28.6 44.7 170788 2 ACI39387 ACI39388 ACI38388 A	39.2 61.3 4697 6 AX239574 AX239574 39.2 61.3 4697 6 BD056450	2 6	39.5	61.3		φ	AR409323	
39.2 61.3 4697 6 BDD56450 4 BDD56450 Novel 1 48.4 236070 2 AC112895 Rattus 236 46.9 236070 2 AC112895 AC112895 Rattus 23.6 46.9 15580 2 AC118845 AC118845 AC118845 AC118845 AC118845 Rattus 29.6 46.2 22913 10 AL772138 MOUSE 29.6 45.3 133265 10 AL772138 AC118845 AC1128567 MUS 29 45.3 133265 10 AL78545 AC128567 MUS 29 45.3 216851 2 AC118154 AC1181578 MOUSE 29 45.3 220407 2 AC12826 AC118154 Rattus 29 45.3 220407 2 AC12826 AC118154 Rattus 29 45.3 23944 2 AC10583 BC077481 AC12858 Rattus 28.6 44.7 170788 2 AC13826 AC139387 AC139387 Rattus 28.6 44.7 244556 2 AC13926 AC13929 AC139256 Rattus 28.4 44.4 183399 2 AC02822 AC138256 AC138259 Homo 88 AC16832 AC12829 Homo 88 AC16832 AC128175 Rattus 28.4 44.4 183399 2 AC02888 Homo 88 AC02888 Homo 88 AC168694 Homo 88 AC128175 AC121175 Rattus 28.4 44.4 196832 2 AC12888 Homo 88 AC168694 Homo 88 AC168	39.2 61.3 4697 6 BD056450 4 BD056 31 48.4 236607 2 AC126995 AC122631 30 46.9 155580 2 AC112651 AC1128 29.6 46.2 229233 10 AL722138 AC112 29.6 46.2 18924 10 AL724355 AL72 29 45.3 133265 10 AL954355 AL73 29 45.3 133265 10 AL954355 AL73 29 45.3 220407 2 AC124657 AC121 29 45.3 220407 2 AC121626 AC122 29 45.3 220407 2 AC121626 AC122 28 44.7 170788 2 AC139387 AC1393 28 6 44.7 170788 2 AC139387 AC1393 28 6 44.7 34536 2 AC139387 AC1393 28 4 44.4 19289 9 AP002229 AP002229 AC121175 AC121 28 4 44.4 196832 9 AC121175 AC12175 AC121175 AC139 28 4 44.4 196832 9 AC121175 AC121175 AC121175 AC131 28 4 44.4 196832 9 AC121175 AC121175 AC121175 AC131 28 4 44.4 196832 9 AC121175 AC121177 AC131 28 4 44.4 196832 AC121175 AC1	25	39.5	61.3		9	AX239574	
31 48.4 204697 2 ACI20995 Rattus 31 48.4 204697 2 ACI20995 Rattus 30 46.9 1558070 2 ACI128571 ACI12571 Rattus 30 46.9 15580 2 ACI18845 ACI12571 Rattus 29.6 46.2 229213 10 AL772138 ACI128457 Mus mus 29.6 45.3 13365 10 AL954355 ACI24657 Mus mus 29 45.3 134267 10 AL954355 ACI21858 Mouse 29 45.3 142667 10 AL135758 Mouse 29 45.3 216851 2 ACI18154 ACI18154 Rattus 29 45.3 233944 2 ACI21626 ACI21626 Rattus 28 45.0 3342 5 BC077481 BC077481 RC0908 28.6 44.7 344320 2 ACI39387 ACI39388 ACI39387 ACI39388 ACI39888 ACI39388 A	31 48.4 204697 2 AC122571 31 48.4 204697 2 AC122571 30 46.2 229213 10 AC122571 29.2 45.2 133265 10 AC124567 29 45.3 220407 2 AC121654 29 45.3 220407 2 AC121654 29 45.3 23344 2 AC106583 28.6 44.7 10788 2 AC106583 28.6 44.7 244536 2 AC099176 28.6 44.7 244536 2 AC099176 28.4 44.4 182389 9 AC02228 28.4 44.4 196832 2 AC022888	26	39.5	61.3		9		BD056450 Novel
31 48.4 236770 2 ACI12571 Rattus 30 46.9 15580 2 ACI18845 Rattus 46.9 15580 2 ACI18845 ACI18845 Rattus 46.9 15580 2 ACI18845 ACI18845 Rattus 45.3 13265 10 ALJ54557 ACI18457 ACI18457 Mus mus 29 45.3 13265 10 ALJ5455 ACI18455 ALJ55455 Muse 29 45.3 216851 2 ACI18154 ACI18456 ACI18458 ACI1855 Rattus 28.6 44.7 170788 2 ACI1855 ACI1855 Rattus 28.6 44.7 34320 2 ACI18387 ACI1855 Rattus 28.4 44.4 18309 2 ACI1856 ACI1855 Rattus 28.4 44.4 18309 2 ACI1856 ACI1855 ACI1855 Rattus 28.4 44.4 18309 2 ACI18694 ACI1858 ACI1858 Home sa 28.4 44.4 18309 2 ACI18694 ACI1858 Home sa 28.4 44.4 208326 2 ACI2888 Home sa ACI21175 Rattus 28.4 44.4 18309 2 ACI2888 Home sa ACI21175 Rattus 28.4 44.4 18309 2 ACI2868 Home sa ACI21175 Rattus 28.4 44.4 208326 2 ACI2888 Home sa ACI21175 ACI318694 Home sa ACI21175 ACI318694 Home sa ACI21175 ACI318694 Home sa ACI21175 ACI318694 Home sa	31 48.4 236070 2 ACII2571 ACII2 29.6 46.9 155580 2 ACII8845 AL772138 29.2 45.6 218924 10 ACI24567 ACI24567 29 45.3 133265 10 AL954355 AL792138 29 45.3 216851 2 ACI18154 ACI218 29 45.3 220407 2 ACI21626 ACI218 29 45.3 220407 2 ACI21626 ACI218 28.6 44.7 170788 2 ACI05893 ACI218 28.6 44.7 170788 2 ACI05893 ACI0366 28.6 44.7 334320 2 ACI0356 ACI0366 28.4 44.4 182389 9 AP0022829 AP002282 28.4 44.4 196832 9 ACI021859 ACI02186 28.4 44.4 196832 0 ACI21856 ACI02186 28.4 44.4 196832 0 ACI21858 ACI2187 28.4 44.4 196832 0 ACI21858 ACI2187 28.4 44.4 196832 0 ACI21859 ACI2187 ALIGNMENTS	27	31	48.4		N		AC120995 Rattue
29.6 46.9 155580 2 AC118845 AC118845 Rattus 29.6 46.2 229213 10 AL772138 MOUSE 29.6 46.2 229213 10 AL772138 AC1124567 MUS 29.6 45.5 18924 10 AL772138 AC124567 MUS 29 45.3 13365 10 AL954355 AC124567 MUS 29 45.3 12667 10 AL135758 AC124567 MUS 29 45.3 21681 2 AC118154 Rattus 29 45.3 220407 2 AC121626 AC121626 Rattus 28.6 44.7 170788 2 AC121628 AC106583 Rattus 28.6 44.7 170788 2 AC139387 AC139387 Rattus 28.6 44.7 244556 2 AC039176 AC139387 Rattus 28.6 44.7 3738 6 CQ656202 AC139256 AC139289 AC018694 HOMO 89 28.4 44.4 183390 2 AC121175 AC121175 Rattus 28.4 44.4 183390 2 AC122185 AC018694 HOMO 89 28.4 44.4 208326 2 AC022888 HOMO 89 AC018694 HOMO 89 AC018694 HOMO 89 AC022888 HOMO 89 AC0228	30 46.9 155580 2 AC118845 29.6 46.2 229213 10 AL722138 29.6 46.2 229213 10 AL722138 29.6 46.2 218924 10 AL954355 29 45.3 133265 10 AL954355 29 45.3 216857 10 AL954355 29 45.3 220407 2 AC121626 29 45.3 220407 2 AC121626 29 45.3 233944 2 AC121626 28.6 44.7 170788 2 AC139387 28.6 44.7 170788 2 AC139387 28.6 44.7 34320 2 AC139387 28.4 44.4 182389 9 AP002229 28.4 44.4 196832 9 AC021859 28.4 44.4 196832 9 AC021859 28.4 44.4 196832 2 AC022888 28.4 44.4 196832 2 AC022888 28.4 44.4 196832 2 AC022888 28.4 44.4 208326 2 AC022888 28.4 44.4 208326 2 AC022888	~	31	∞		N	AC112571	Rattus
29.6 46.2 22913 10 AL772138 AL772138 MOUBES 29.2 45.6 118924 10 AL054567 AL05547 AL0554355 MAL054355 AL0554355 MAL0554355 MAL0554355 MOUSE 29 45.3 118265 10 AL0554355 MOUSE 29 45.3 118051 2 AC118154 AC118154 AC118154 MOUSE 29 45.3 220407 2 AC128165 AC106583 Rattus 29 45.3 233944 2 AC106583 AC106583 Rattus 28.6 44.7 170788 2 AC105583 MOUSE 28.6 44.7 170788 2 AC103387 AC105583 Rattus 28.6 44.7 184556 2 AC099176 AC10356 AC105583 Rattus 28.6 44.7 184289 2 AC103256 AC10356 AC10356 AC10358 AC10852 Homo sa 28.4 44.4 182389 9 APPOC2829 APPOC2829 HOMO sa 28.4 44.4 196832 9 AC022888 AC121175 Rattus 28.4 44.4 196832 9 AC022888 AC022888 HOMO sa 28.4 44.4 208326 2 AC02888 HOMO sa 28.4 4	29.6 46.2 229213 10 AL772138 AL77 29.2 45.6 218924 10 AC124567 AL98 29 45.3 133265 10 AC124567 AL98 29 45.3 133265 10 AL135758 AL13 29 45.3 2142667 10 AL135758 AL13 29 45.3 220407 2 AC118154 AC1181 29 45.3 23344 2 AC12658 AC126 28.6 44.7 170788 2 AC106583 AC126 28.6 44.7 244536 2 AC09976 AC139 28.6 44.7 34320 2 AC09976 AC139 28.4 44.4 182389 9 AP002829 AP002829 AC128 28.4 44.4 196832 9 AC0218684 AC028 28.4 44.4 196832 2 AC022888 AC02888 28.4 44.4 208326 2 AC022888 AC028	N	30	ů.		0	AC118845	
29.2 45.6 21824 10 AC124567 AC124567 Mus mu 29 45.3 13265 10 AL135155 AL135155 Muse 2 2 45.3 13265 10 AL135156 AL135158 AL135758 Mouse 2 2 45.3 216851 2 AC121626 AC121176 AC1	29.2 45.6 218924 10 ACI24567 ACI2 29 45.3 13265 10 AL95455 AL13 29 45.3 214267 10 AL95455 AL13 29 45.3 220407 2 ACI18154 ACI18 29 45.3 220407 2 ACI06583 ACI318 28.6 44.7 170788 2 ACI30589 ACCO30 28.6 44.7 170788 2 ACI30387 ACI33 28.4 44.4 182389 9 AC012175 ACI3266 ACI32 28.4 44.4 182389 9 AC018694 ACI21 28.4 44.4 196832 0 ACI21775 ACI31 28.4 44.4 208326 2 ACI3175 ACI31 28.4 44.4 208326 2 ACI3175 ACI3177 ACI3774 ACI31774 ACI38694 ACI31878	30	٥.	46.2		10	AL772138	
29 45.3 13365 10 AL054355 AL054355 Mouse 29 45.3 21667 10 AL0135758 AL0543558 Mouse 29 45.3 21667 10 AL0135758 AL018154 Mouse 29 45.3 220407 2 AC121626 29 45.3 220407 2 AC121626 29 45.3 23344 2 AC106583 AC106583 Rettus 28.6 44.7 170788 2 AC139387 AC039176 Rettus 28.6 44.7 244556 2 AC039176 AC139387 Rettus 28.6 44.7 33420 2 AC13256 CO556202 Sequenc 28.4 44.4 378 6 CQ656202 AC13256 Rettus 28.4 44.4 183399 3 AC002829 AC02888 AC008694 Homo sa 28.4 44.4 196832 9 AC018694 28.4 44.4 208326 2 AC022888 Homo sa 28.4 44.4 208326 2 AC022888 Homo sa	29 45.3 133265 10 AL954355 AL95 29 45.3 142667 10 AL135758 AL92 29 45.3 220407 2 AC121626 29 45.3 220407 2 AC121626 29 45.3 23344 2 AC126583 AC120 28.6 44.7 170788 2 AC139387 28.6 44.7 170788 2 AC139387 28.6 44.7 34320 2 AC13356 AC13356 28.4 44.4 182389 9 AP002829 AP002829 28.4 44.4 196832 9 AC022888 AC121 28.4 44.4 196832 0 AC121175 AC121 28.4 44.4 196832 2 AC022888 AC022888 AC023 ALIGNMENTS AC13774 AC028	31	e,	45.6		10	AC124567	AC124567 Mus musc
29 45.3 142667 10 AL135758 AL135758 MOUBES 29 45.3 216851 2 AC118154 AC118154 AC118154 AC118154 29 45.3 23944 2 AC121626 AC118154 AC121626 SERUNB 29 45.3 23944 2 AC105583 AC106583 RATUB 28.6 44.7 170788 2 AC139387 AC13937 RATUB 28.6 44.7 344536 2 AC139387 AC13937 RATUB 28.6 44.7 344536 2 AC13956 AC099176 RATUB 28.4 44.4 183389 2 AC131356 AC13256 RATUB 28.4 44.4 183389 2 AC121175 RATUB 28.4 44.4 196832 9 AC018694 AC022898 HOMO SE 28.4 44.4 208326 2 AC022888 AC022898 HOMO SE 28.4 44.4 208326 2 AC022888	29 45.3 142667 10 AL135758 AL13 29 45.3 220407 2 AC121626 29 45.3 220407 2 AC121626 29 45.3 23394 2 AC121626 29 45.3 23394 2 AC106283 28.6 44.7 170788 2 AC103387 28.6 44.7 170788 2 AC103387 28.6 44.7 244536 2 AC09976 28.4 44.4 182389 9 AP002829 28.4 44.4 196832 9 AC018694 28.4 44.4 196832 2 AC02888 28.4 44.4 208326 2 AC022888 ALIGNMENTS AC11774 AC11774 AC11774 AC11774 AC11777	m	53	45.3		10	AL954355	AL954355 Mouse DN
29 45.3 216851 2 AC118154 AC118154 Rattu 29 45.3 220407 2 AC121626 AC121626 AC121626 AC121626 AC121626 AC121626 AC121626 AC106583 AC106583 AC106583 AC106583 AC106583 AC106583 AC106583 Rattu 28.6 44.7 170788 2 AC133187 AC1333187 AC133318 AC	29 45.3 216851 2 AC118154 AC1218 29 45.3 220407 2 AC121626 29 45.3 233944 2 AC126583 AC1205 28.6 44.7 170788 2 AC132387 AC139 28.6 44.7 244536 2 AC133287 AC139 28.4 44.4 334320 2 AC132175 AC139 28.4 44.4 183389 9 AP002299 AC12175 28.4 44.4 183090 2 AC121175 28.4 44.4 208326 2 AC121775 AC138 28.4 44.4 208326 2 AC121775 AC12177 AC11774 AC11774 DAMPINITS	m	53	45.3		10	AL135758	Mouse
29 45.3 220407 2 AC121626 AC121626 Rattu 29 45.3 23944 2 AC106583 AC106583 Rattu 28.6 44.7 170788 2 AC139387 AC139387 Rattu 28.6 44.7 244536 2 AC139387 AC139387 Rattu 28.6 44.7 34320 2 AC139387 AC139387 Rattu 28.4 44.4 334320 2 AC139356 AC13256 Rattu 28.4 44.4 183389 9 AP002829 AP002829 HOMO 28.4 44.4 183090 2 AC12175 AC12175 AC12175 Rattu 28.4 44.4 183090 2 AC12175 AC12175 AC018694 HOMO 28.4 44.4 208326 2 AC122888 HOMO 28.4 44.4 208326 2 AC122888 HOMO	29 45.3 220407 2 ACI21626 28.8 45.3 23944 2 ACI06583 28.6 44.7 170788 2 ACI39387 28.6 44.7 244536 2 ACI39387 28.6 44.7 244536 2 ACI39387 28.4 44.4 3780 2 ACI3356 28.4 44.4 182389 9 AP002229 28.4 44.4 196832 9 ACI21175 28.4 44.4 196832 9 ACI21175 28.4 44.4 208326 2 ACI221878 28.4 44.4 208326 2 ACI221878 28.7 ACI21277 28.7 ACI3774 28.7 ACI3774 274508 https://doi.org/10.00000000000000000000000000000000000	m	29	45.3		~	AC118154	Rattus
29 45.3 233944 2 AC106583 AC106583 Rattu 28.6 44.7 170788 2 AC139387 AC139387 Rattu 28.6 44.7 244536 2 AC139387 AC139387 Rattu 28.6 44.7 334320 2 AC133256 AC099176 Rattu 28.4 44.4 182389 9 AP002829 AC1313256 Rattu 28.4 44.4 182389 9 AP002829 AC121175 Rattu 28.4 44.4 183090 2 AC121175 AC121175 Rattu 28.4 44.4 208326 2 AC022888 AC022888 HOMO 28.4 44.4 208326 2 AC022888 AC022888 HOMO	29 45.3 233944 2 AC106683 AC106 28.6 44.7 170788 2 AC139387 28.6 44.7 244536 2 AC139387 28.6 44.7 34320 2 AC139387 28.4 44.4 34320 2 AC13256 28.4 44.4 182389 9 AP002829 28.4 44.4 196832 2 AC02888 28.4 44.4 208326 2 AC022888 ALIGNMENTS ALIGNMENTS AC11374 AC11874	35	53	45.3		7	AC121626	Rattue
28.6 45.0 3742 5 BC077481 BC077441 Xenograms 44.7 124748 2 AC139387 AC139387 Rattit 28.6 44.7 244536 2 AC099176 AC139387 Rattit 28.6 44.7 334320 2 AC139256 AC13256 Rattit 28.4 44.4 182389 9 AP002229 AP002228 AC13256 Rattit 28.4 44.4 183389 9 AP002229 AP002289 HOMO 28.4 44.4 183090 2 AC12175 AC12175 Rattit 28.4 44.4 196832 9 AC018694 AC012689 HOMO 28.4 44.4 208326 2 AC022888 AC022888 HOMO AC0	28.8 45.0 3742 5 BC077481 BC077 28.6 44.7 170788 2 AC139387 AC139 28.6 44.7 334320 2 AC13256 AC1913 28.4 44.4 183389 9 AP002829 AC103 28.4 44.4 183080 2 AC121775 AC191 28.4 44.4 183080 2 AC121775 AC121 28.4 44.4 208326 2 AC121775 AC121 28.4 44.4 208326 2 AC128694 AC121 ALIGNMENTS AC11774 AC11774 AC118774 AC121876	36	5	45.3		7	AC106583	Rattus
28.6 44.7 170788 2 AC139387 AC139387 Rattu 28.6 44.7 244536 2 AC099176 AC099176 Rattu 28.4 44.4 374320 2 AC113256 AC113256 Rattu 28.4 44.4 183389 9 AP002829 AC002829 HOMO 28.4 44.4 183090 2 AC121175 AC121175 Rattu 28.4 44.4 196832 9 AC018694 HOMO 28.4 44.4 208326 2 AC122888 AC022888 HOMO 28.4 44.4 208326 2 AC122888 AC022888 HOMO	28.6 44.7 170788 2 AC139387 AC139 28.6 44.7 244536 2 AC099176 AC099 28.6 44.7 334320 2 AC193176 AC099 28.4 44.4 182389 9 AF002829 AF00282 28.4 44.4 196832 9 AC0121175 AC121 28.4 44.4 196832 9 AC018694 AC018 28.4 44.4 208326 2 AC022888 AC022 ALIGNMENTS AC11774 AC018	m	28.8	45.0		'n	BC077481	
28.6 44.7 244536 2 AC099176 AC099176 Rattu 28.6 44.7 334320 2 AC113256 AC113256 Rattu 28.4 44.4 182389 9 AP002829 CG65620 Seque 28.4 44.4 183389 2 AC018694 AC02829 Homo 28.4 44.4 196832 9 AC018694 AC018694 Homo 28.4 44.4 208326 2 AC02888 AC022888 Homo ALIGNMENTS	28.6 44.7 244536 2 AC099176 28.6 44.7 34320 2 AC13256 28.4 44.4 378 6 CC556202 28.4 44.4 182389 9 AP002829 28.4 44.4 196830 2 AC121175 28.4 44.4 196832 2 AC022888 28.4 44.4 208326 2 AC022888 ALIGNMENTS ALIGNMENTS AC111774 AC111774 AC111774 AC111774 AC0834 AC0854 ALIGNMENTS	m	28.6	4		N	AC139387	7 Rattus
28.6 44.7 334320 2 AC113256 AC113256 Rattu 28.4 44.4 378 6 CQ555202 CQ555202 CQ555202 Seque 28.4 44.4 182389 9 AP002829 AP002829 HOMD 28.4 44.4 183090 2 AC121175 Rattu 28.4 44.4 196832 9 AC018694 AC018694 HOMD 28.4 44.4 208326 2 AC022888 AC022888 HOMD	28.6 44.7 334320 2 AC113256 28.4 44.4 378 6 CQ656202 CQ656 28.4 44.4 18238 9 AC02829 28.4 44.4 18238 9 AC121175 28.4 44.4 196832 9 AC018694 28.4 44.4 208326 2 AC022888 ALIGNMENTS ALIGNMENTS AC111774 245085 bb	m	28.6	44.		7	AC099176	6 Rattus
28.4 44.4 18389 9 AP002829 AP002829 Seque 28.4 44.4 183090 2 AC121175 AC121175 Rattl 28.4 44.4 196832 9 AC018694 AC121175 Rattl 28.4 44.4 208326 2 AC122888 AC022888 Homo AC02288 HOMO AC0228	28.4 44.4 378 6 CO55502 CO555 28.4 44.4 183090 9 AP002829 AP00282 28.4 44.4 183090 9 AC018694 28.4 44.4 208326 2 AC022888 AC0318 28.4 44.4 208326 2 AC022888 AC0228888 AC028888 AC0288	4	28.6	44.7	m	7	AC113256	6 Rattus
28.4 44.4 182389 9 AP002829 AP002829 HOMO 28.4 44.4 183090 2 AC121175 AC121175 Rattu 28.4 44.4 196832 9 AC018694 AC018694 AC018694 HOMO 28.4 44.4 208326 2 AC022888 AC022888 HOMO AC022888 HOMO AC022888 ALIGNMENTS	28.4 44.4 182389 9 AP002829 AP0028 28.4 44.4 1963090 2 AC121175 AC121 28.4 44.4 196832 9 AC0218694 AC018 28.4 44.4 208326 2 AC022888 AC022 ALIGNMENTS AC11774 208326 ALIGNMENTS	4	28.4	44.4		9	CQ656202	
28.4 44.4 183090 2 AC121175 AC121175 Rattu 28.4 44.4 196832 9 AC018694 AC018694 Homo 28.4 44.4 208326 2 AC022888 AC022888 Homo	28.4 44.4 183090 2 AC121175 AC121 28.4 44.4 196832 9 AC018694 AC018 28.4 44.4 208326 2 AC022888 AC022 ALIGNMENTS ALIGNMENTS	42	28.4	4		Φ	AP002829	
28.4 44.4 196832 9 AC018694 AC018694 HOMO 28.4 44.4 208326 2 AC022888 HOMO AC022888 HOMO ALIGNMENTS	28.4 44.4 208326 2 AC018694 AC018 28.4 44.4 208326 2 AC022888 AC022 ALIGNMENTS ALIGNMENTS AC111774 245095 hp. DNA linear	43	28.4	4	18309	7	AC121175	FU.
28.4 44.4 208326 2 AC022888 AC022888 Homo	28.4 44.4 208326 2 AC022888 ALIGNMENTS AC111774 245085 hy DNA linear	4	٠.	4	19683	0	AC018694	4 Homo
	ALIGNMENTS ACI11774 245095 hp. DNA linear	4		4	20832	7	AC022888	88 Ношо
RESULT 1	AC111774 245095 hy DNA linear						ALIGNMENTS	
RESULT 1	AC111774 245095 hr DNA linear							
	AC111774 . 245095 hn DNA linear	RESULT 1						

Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus norvegicus clone CH230-171G2, WORKING DRAFT SEQUENCE, unordered pieces. HTG; HTGS_PHASE1; HTGS_DRAFT; HTGS_FULLTOP. Rattus norvegicus (Norway rat) AC111774.4 GI:24818709 (bases 1 to 245095) Rattus. VERSION KEYWORDS SOURCE ORGANISM DEFINITION REFERENCE AUTHORS ACCESSION

Allen, C., Allen, H., Alsbrooks, S., Amin, A., Angulano, D., Anyalebechi, V., Aoyagi, A., Ayodeji, M., Baca, B., Baden, H., Baldwana, M., Barber, M., Barnatead, M., Benahmed, F., Biswalo, K., Blair, J., Blankenburg, K., Bish, P., Brown, M., Bryant, N., Blair, J., Blankenburg, K., Bish, P., Brown, M., Bryant, N., Bular, J., Blankenburg, K., Bish, P., Brown, M., Cardenas, V., Carter, K., Cavazos, I., Caasar, H., Canter, A., Chen, Z., Chu, J., Clacko, J., Chavez, D., Chen, G., Cock, C., Coyle, M., Cree, A., D'Souza, L., Davila, M.L., Davis, C., Davy-Carroll, L., De Anda, C., Dederich, D., Davila, M.L., Davis, C., Davy-Carroll, L., De Anda, C., Dederich, D., Draper, H., Dugan-Rocha, S., Durnan, A., Durbin, K., Duval, B., Eaves, K., Egan, A., Escotto, M., Eugene, C., Evans, C.A., Falls, T., Fan, G., Fernandez, S., Finley, M., Flagg, N., Forbes, L., Foster, M., Garza, M., Gebregeorgis, E., Geer, K., Ganta, R., Gardy, M., Guerra, W., Gunaratne, P., Haaland, W., Hamil, C., Hamilton, C., Hamilton, K., Hondens, J., Hernandez, J., Hawes, A., Hander, S., Hadun, S.L., Hodgson, A., Hogues, M., Karpathy, S., Kelly, S., London, P., Longa, L., Lopez, J., Liu, W., Liu, Muzny, D. Marie., Metzker, M. Lee., Abramzon, S., Adams, C., Alder, J., C.L., Lebow,H., Levan,C., Lopez,U. Liu,Y., London,P., Longacre,S., Lu,X., Louleged,H., Lozado,R.J., Lu,X., Man,J., Mahindarrne,M., Mahmoud,M., Martinez,B. Lorensuhewa, L.,

Mangum, B., Mapua, P., Martin, K., Martin, R., Martil Mawhiney, S., McLeod, M.P., McNeill, T.Z., Meenen, E

Maheshwari, M., Mahindartne, M. Mangum, B., Mapua, P., Martin, B.

Sequence

```
Milosavljevic, A., Miner, G., Minja, E., Montemayor, J., Moore, S., Morgan, M., Morris, S., Munidasa, M., Murphy, M., Nair, I., Nankeris, S., Munidasa, M., Murphy, M., Nair, I., Navels, S., Nasl, D., Newton, N., Nayren, N., Norris, S., Nasl, D., Navelon, S., Parks, K., Pasternak, S., Paul, H., Perez, A., Perez, L., Pfannkoch, C., Plopper, P., Poindester, A., Popovic, D., Pirimus, B., Pul. -L., Puazo, M., Quiroz, J., Rachlin, E., Reves, K., Rejer, M.A., Reigh, R., Railly, B., Railly, M., Ren, Y., Router, M., Rose, M., Rose, R., Ruiz, S.J., Shen, H., Sanders, W., Savery, G., Scherer, S., Scott, G., Shatsman, S., Shen, H., Sneed, A., Sadergren, E., Song, X.-Z., Sorelle, R., Sosa, J., Sneed, A., Sodergren, E., Sutton, A., Svatek, A., Trabor, P., Taylor, C., Taylor, T., Thomas, M., Thomas, S., Tingey, A., Trejos, Z., Usmani, K., Valas, R., Wailson, M., Thomas, S., Tingey, A., Trejos, Z., Usmani, K., Wailson, S., Wailson, R., Wailson, H., Wailson, R., Wailson, H., Wailson, R., Wailson, H., Wailson, R., Wailson, H., Wailson, R., Wailson, M., Zhou, J., Yoon, L., Yoon, L., Yoon, L., Yoon, V., Wailson, M., Wainstock, G. and Gibbs, R.A., Smith, D.R., Holt, R.A., Smith, H.O., Wannetock, G. and Gibbs, R.A., Smith, D.R., Holt, R.A., Smith, H.O., Wannetock, G. and Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
```

(bases 1 to 245095) published to the d

orley, K.C.

Submitted (19-FEB-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA oirect Submission

(bases 1 to 245095)
tat Genome Sequencing Consortium.

Submitted (09-NOV-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA REFERENCE AUTHORS TITLE JOURNAL

COMMENT

Daylor Figs., nouselow, in (100), used to now 9, 2002 this sequence version replaced gi:23321701.

The sequence in this sequence version replaced gi:23321701.

The sequence in this sequence version of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas and the feature table below represents a scaffold in the Atlas assembly (a 'contig-scaffold'). Within each contig-scaffold', Mithin each contig-scaffold', by sized gaps filled with Ns to the estimated size. The sequence may extend beyond the ends of the clone and there may be sequence contigs within a contig-scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence conly contigs will be indicated in the feature

Web site: http://www.hgsc.bcm.tmc.edu/ Contact: hgsc-help@bcm.tmc.edu ------ Genome Center Center: Baylor College of Medicine Center code: BCM

----- Project Information 90B0 Center project name:

Center clone name: CT230-171G2
Center clone name: CT230-171G2
Assembly program: Phrap, version 0.990329
Consensus quality: 153773 bases at least Q40
Consensus quality: 160170 bases at least Q30
Consensus quality: 164659 bases at least Q30
Estimated insert size: 160182; sum-of-contigs estimation
Quality coverage: 10x in Q20 bases; sum-of-contigs estimation

NOTE: Betimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).
NOTE: This is a "working draft' sequence. It currently consists of 10 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will

contig of 45126 bp in length gap of unknown length contig of 3540 bp in length gap of unknown length contig of 11229 bp in length gap of unknown length contig of 4277 bp in length unknown length of 14658 bp in length unknown length gap of unknown length contig of 36066 bp in length gap of unknown length contig of 54557 bp in length 45095: contig of 1153 bp in length ion/Qualifiers ength gap of unknown length /organism="Rattus norvegicus" /mol_type="genomic DNA" /db_xref="taxon:10116" contig of /clone="CH230-171G2 gap of /note="wgs_contig" 239566. .240945 38548. .89924 /note="wgs_contig" 31432. .93819 /note="wgs_contig" 116848. .118080 note="wgs_contig" 24714. .126005 'note="wgs_contig" 28237. .229783 /note="wgs_contig" 245095: 124714. 91432. 88548. be preserved 38548 243943 124614 2449 misc_feature misc_feature misc_feature misc_feature misc_feature misc_feature source FEATURES ORIGIN

148400 reargacereartriagaaceaagagerigirigerireriagarigriaacriritricic 148459 09 1 TCATGACCTCATTTAGGACCAAGAGCTGTGGTTGGTTTCTTAGATTGTTAGCTTTTTCTC 셤 ð 8

Gape

ö

0; Indels

Query Match
100.0%; Score 64; DB 2; I
Best Local Similarity 100.0%; Pred. No. 6.3e-11;
Matches 64; Conservative 0; Mismatches 0;

Length 245095;

RESULT 2 BC060227

BCG60227 4702 bp mRNA linear ROD 12-OCT-2004 Mus musculus taxilin, mRNA (cDNA clone MGC:77972 IMAGE:30357541), Mus musculus (house mouse) BC060227.1 GI:38614270 complete cds VERSION KEYWORDS SOURCE ORGANISM LOCUS DEFINITION ACCESSION

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus (bases 1 to 4702) Mus musculus

Straubberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Haich, F., Diatchenko, L., Marusin, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

AUTHORS

REFERENCE

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

nucleic search, using sw model OM nucleic Run on:

April 24, 2005, 07:20:29'; Search time 266 Seconds (without alignments) 1424.299 Million cell updates/sec

US-10-663-418-71 64 Title: . Perfect score:

1 tcatgacctcattttaggac.....ttgttagctttttctctaga 64 Sequence:

Scoring table:

IDENTITY NUC Gapop 10.0 , Gapext 1.0

4390206 segs, 2959870667 residues Searched:

of hits satisfying chosen parameters:

Total number

8780412

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

N Geneseq 16Dec04: Database :

geneseqn2001as: geneseqn1990s:* geneseqn2000s:

geneseqn2003ds: geneseqn2003cs: geneseqn2003as: geneseqn2003bs: geneseqn2002bs: geneseqn2002as

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

geneseqn2004bs:

geneseqn2004as

SUMMARIES

Description	Abk35029 Human cDN	Adp54990 Human PRO	Acc46153 Human dit	Acc46130 Human dit	Aah26497 Human low	Acd13448 Human DNA	Aav32836 Rabbit lo	Aah26491 Rabbit lo	Aav32839 Human low	Aah26496 Human low	Adq52076 Novel can	Aat23888 Human gen	Abx66285 Helicobac	Abx65642 Helicobac	Abx66280 Helicobac	Aax14487 H. pylori	Abz10086 Haematopo	Acn87401 Breast ca	Abg70768 Listeria	Adm91308 DNA homol
QI	ABK35029	ADP54990	ACC46153	ACC46130	AAH26497	ACD13448	AAV32836	AAH26491	AAV32839	AAH26496	ADQ52076	AAT23888	ABX66285	ABX65642	ABX66280	AAX14487	ABZ10086	ACN87401	ABQ70768	ADM91308
* Query Match Length DB	1926 6	2145 13	5085 8	6577 8	22255 5	15756 8	4722 . 2	4722 5	4697 2	4697 5	635 13	268 2	1024 6	1024 6	1024 6	1035 2	6325 8	569 11	2418 6	2875 12
Query Match L	71.2	71.2	71.2	71.2	71.2	71.2 1	64.7	64.7	61.3	61.3	59.4	52.5	42.5	42.5	42.5	42.5	42.5	41.2	41.2	.41.2
Score	45.6	45.6	45.6	45.6	45.6	45.6	41.4	41.4	39.5	39.2	38	33.6	27.2	27.2	27.2	27.2	27.2	26.4	26.4	26.4
Result No.	1	0	æ	4	S	9	7	6 0	<u>ه</u>	01	11	12	. 13	14	15	16	17	c 18	c 19	50

Adq97464 Mouse can	Continuation (22 o	Aat32583 Alfalfa i	Abk15038 Canine di	Abk15000 Canine di	Abk15039 Canine di	" Abk42608 Genomic B	Adb60764 Connectiv	Ada02567 Mouse Gat	Adb72305 Mouse Gat	Ade95815 Mouse Gat	Aas46748 Tumour su	Adl13825 Osteoarth	Abd32548 Human can	Adb63505 Human cDN	Abz10232 Haematopo	Continuation (6 of	Adq97240 Mouse can	Abd33020 Mouse can	. Aak83205 Human imm	Abl38563 Human col				
ADQ97464	ABA03041 21	AAT32583	ABK15038	ABK15000	ABK15039	ABK42608	ADB60764	ADA02567	ADB72305	ADE95815	AAS46748	ADL13825	ABD32548	ADB63505	ABZ10232	AAK95240 05	AAK96733 05	ABT00010 05	ABT01503 05	ADH77486 05	ADQ97240	ABD33020	AAK83205	ABL38563
12	9	~	9	9	v	4	σ	0	10	2	4	ដ	13	ដ	œ	4	4	9	ø	12	12	2	4	9
25800	110000	2730	15690	15690	18826	16825	16825	23243	23243	23243	26997	192427	310268	1754	6325	110000	110000	110000	110000	110000	28449	256294	275	427
41.2	41.2	40.9	40.9	40.9	40.9	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.0	40.0	40.0	40.0	40.0	40.0	40:0	39.7	39.7	39.4	39.4
26.4	26.4	26.2	26.2	26.2	26.2	25.8	25.8	25.8	25.8		25.8	25.8	25.8	25.6	25.6	25.6	25.6	25.6	25.6	25.6	25.4	25.4	25.2	25.2
21	22	23	24	.25	56	27	28	53	30	.31	32	33	34	32	36	37	38	39	40	41	42	43	44	45
υ	υ	ņ										Ü		υ		υ	O	υ	υ	υ	U		υ	

ALIGNMENTS

ABK35029 standard; cDNA; 1926 BP

ABK35029;

(first entry) 08-MAY-2002 Human cDNA encoding secreted protein #167.

Human, secreted protein, gene, ss; nutritional supplement; haemophilia, viral infection; bacterial infection; fungal infection; diabetes; aethmas autoimmune disorder; rheumatoid arthritis; multiple sclerosis; tumour; autoimmune thyroiditis; allergic reaction; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; liver fibrosis; cancer; ulcer; coagulation disorder; inflammatory disorder; Crohn's disease; incision; tissue regeneration; wound haaling; burn; haematopoiesis; moision; mysloid cell deficiency; lymphoid cell deficiency.

Homo sapiens

WO200177288-A2.

18-OCT-2001.

29-MAR-2001; 2001WO-US010224.

06-APR-2000; 2000US-0195582P.

(GEMY) GENETICS INST INC

Wong GG, Clark HF, Fechtel K, Agostino MJ, Howes SH, Resnick RJ; Gulukota K, Graham JR;

WPI; 2002-179321/23.

Five hundred and ninety two polynucleotides derived from a variety of human tissue sources which encode secreted proteins, useful for treating immune deficiencies and disorders such as autoimmune disorders.

Claim 1; Page 152; 372pp; English.

The invention relates to 592 polynucleotides which have been derived from

```
Arjona, Anibal A.
TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lees, Robert
Law, Simon W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 51
LENGTH: 22255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-979-608A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                               April 24, 2005, 07:25:03; Search time 97 Seconds (without alignments) 1079.605 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 124840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                     64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
Sequence
                                                                                                                                                                                                     tcatgacctcattttaggac.....ttgttagcttttctctaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /cgm2_6/prodata/1/ina/5A_COMB.seq:*
/cgm2_6/prodata/1/ina/5B_COMB.seq:*
/cgm2_6/prodata/1/ina/6A_COMB.seq:*
/cgm2_6/prodata/1/ina/6B_COMB.seq:*
/cgm2_6/prodata/1/ina/PcTUS_COMB.seq:*
/cgm2_6/prodata/1/ina/PcTUS_COMB.seq:*
GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-616-289-14

US-08-979-608A-17

US-09-517-849-17

US-09-949-016-171883

US-09-949-016-171884

US-09-949-016-171884

US-09-949-016-12227

US-09-949-016-12227

US-09-949-016-1288

US-09-949-016-1288

US-09-949-016-14588

US-09-949-016-14588

US-09-949-016-14588

US-09-949-016-14589

US-09-949-016-14589

US-09-949-016-14589

US-09-949-016-14589

US-09-949-016-14589

US-09-949-016-14589

US-09-949-016-14589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -09-949-016-16603.
-09-949-016-149477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -09-949-016-158019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -09-949-016-158020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-949-016-124840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .09-949-016-16150
                                                                                                                                                                                                                                                                                                                  of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                    1202784 segs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                   nucleic search, using sw model
                                                                                                                                                                                                                                  IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Issued Patents NA:*
                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                               US-10-663-418-71
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  36620
87352
87352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4697
4697
4697
601
601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
156942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                56950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               302604
302604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 00598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  308362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
               Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 232547
                                                                                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                   Total number
                                                                 nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database :
                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                      Searched:
                                                                                                  Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                 ξõ
```

15777, A	15270, A	2583, A	17392, A	1, Appl	30194,	15419, A	24772, A	24773, A	24774, A	35142, A	5143, A	5144, A	5171, A	35172, A	5173, A	.73472,	73473,
	Sequence 1	Sequence 1	•	Sequence 1	Sequence 1						m	m	m		m	_	_
US-09-949-016-15777	US-09-949-016-15270	US-09-949-016-12583	US-09-949-016-17392	US-10-027-983-11	US-09-949-016-130194	US-09-949-016-154194	US-09-949-016-24772	US-09-949-016-24773	US-09-949-016-24774	US-09-949-016-35142	US-09-949-016-35143	US-09-949-016-35144	US-09-949-016-35171	US-09-949-016-35172	US-09-949-016-35173	US-09-949-016-173472	US-09-949-016-173473
₹.	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
80411	192302	254964	254964	392000	109	212449	. 601	601	601	.601	601	601	601	601	601	601	601
39.7	39.7	39.4	39.4	39.4	39.1	39.1	38.8	38.8	38.8	38.8	38.8	38.8	38.8	8	38.8	38.8	38.8
25.4	25.4	25.2	25.2	25.2		25	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
		υ	υ				O	υ	υ	υ	Ü	v	O	υ	υ	υ	U

ALIGNMENTS

```
APPLICANT: Lees, Ann M.
APPLICANT: Lees, Robert S.
TYTLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN BINDING
TITLE OF INVENTION: PROTEINS AND THEIR USE IN DIAGNOSING AND TREATING
TITLE OF INVENTION: ATHEROSCLEROSIS
FILE REFERENCE: 10797-004001
CURRENT APPLICATION NUMBER: US 09/516,289
CURRENT PILLING DATE: 2000-03-02
PRIOR FILLING DATE: 2000-03-02
PRIOR FILLING DATE: 1997-11-26
PRIOR FILLING DATE: 1997-11-27
PRIOR APPLICATION NUMBER: US 60/031,930
PRIOR FILLING DATE: 1996-11-27
PRIOR PILLING DATE: 1996-11-27
PRIOR PILLING DATE: 1996-11-27
PRIOR PILLING DATE: 1997-06-03
NUMBER OF SEQ ID NOS: 53
NUMBER OF SEQ ID NOS: 53
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19382 TITTAGGACCAAGATCTGTTTGGTTTCTTAGATTGCTAGCTTTTCCTCCAG 19433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 45.6; DB 4; Length 22255;
Pred. No. 7.6e-06;
0; Mismatches 4; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GITGGTTTCTTAGATTGTTAGCTTTTTCTCTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 14, Application US/08979608A Patent No. 6355451 GENERAL INFORMATION:
Sequence 51, Application US/09616289
Patent No. 6632923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Lees, Ann M.
Lees, Robert S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71.2%;
92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity, 92.3
Matches 48; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) ORGANISM: Homo sapiens
US-09-616-289-51
                                                             GENERAL INFORMATION:
```

Sequence 17, Appl Sequence 1128, Ap Sequence 1128, Ap Sequence 401, App

Sequence 17, Ap Sequence 17, Ap Sequence 17, A

Sequence 17 Sequence 17

Sequence 152420

Sequence Sequence Sequence

Sequence

Sequence 226, Sequence 2,

Sequence 267997, Sequence 267996, Sequence 267997,

Sequence 7735

Sequence Sequence Sequence

Sequence

Sequence 3 Sequence 7 Sequence 7

Sequence 1495, Ap

Seguence

Sequence Sequence

Sequence 195,

us-10-663-418-71.rnpb

Perfect score:

Sequence:

OM nucleic

Run on:

Scoring table:

Bed Bed

Minimum DB Maximum DB

Database

```
APPLICANT: Fechtel, Kim
APPLICANT: Agostino, Michael J.
APPLICANT: Agostino, Michael J.
APPLICANT: Agostino, Michael J.
APPLICANT: Howes, Steven H.
APPLICANT: Gulukota, Kamalakar
APPLICANT: Gulukota, Kamalakar
APPLICANT: Grantino, Dolnino B. R.
APPLICANT: Grantino Bolinino Bolinino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTTAGGACCAAGAGCTGTGTTGTTCTTAGATTGTTAGCTTTTTCTCTAG
2 17 US-10-671-242-14

7 9 US-09-962-055-17

7 13 US-10-023-529-17

7 17 US-10-023-529-17

7 17 US-10-023-529-17

7 17 US-10-023-523-17

7 17 US-10-023-523-17

8 17 US-10-024-535A-1128

8 17 US-10-242-535A-1128

8 17 US-10-242-535A-1128

8 18 US-10-035-632-128

13 US-10-027-632-152420

14 US-10-027-632-17545

17 US-10-027-632-17545

18 US-10-027-632-1733

18 US-10-027-632-7733

19 US-10-027-632-7733

10 US-10-027-632-7733

11 US-10-027-632-7734

12 US-10-027-632-7734

13 US-10-027-632-7734

14 US-10-027-632-7734

17 US-10-027-632-7734

18 US-10-027-632-7734

17 US-10-027-632-7734

18 US-10-027-632-7734

19 US-10-027-632-7739

10 US-10-027-632-267996

11 US-10-027-632-267996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 45.6; DB 9;
Pred. No. 1e-05;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 167, Application US/09822849A Patent No. US20020045170A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 71.2%;
1 Similarity 92.3%;
48; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Wong, Gordon G. APPLICANT: Clark, Hilary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
US-09-822-849A-167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 48; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6.04
6.03
6.03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12
                                                                                                                                                                                                                                                                             April 24, 2005, 07:58:43 ; Search time 300 Seconds (without alignments) 1295.158 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 51, Sequence 51, Sequence 14, Sequence 14, Sequence 14, Sequence 14, Sequence 14, Sequence 14,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 167,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 tcatgacctcattttaggac.....ttgttagctttttctctaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
(cgn2_6/ptodata/1/pubpna/USO6_NEW_PUB.seq:*
(cgn2_6/ptodata/1/pubpna/USO6_NEW_PUB.seq:*
(cgn2_6/ptodata/1/pubpna/USO7_NEW_PUB.seq:*
(cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.seq:*
(cgn2_6/ptodata/1/pubpna/USO0_PUBCOMB.seq:*
                                                           5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-023-529-51
US-10-023-523-51
US-10-616-187-51
US-10-671-242-51
US-09-962-055-14
US-09-976-740-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-023-529-14
US-10-023-523-14
US-10-616-187-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5633728 segs, 3035525691 residues
                                                           version :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                          nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                           GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-663-418-71
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22225
22225
222255
222255
4722
4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match
```

ö

Gape

ô

Indels

45.6 45.6 45.6 41.4

Result No.

C 25 61.4 95.9 748 7 CC042637 CC042637 UI-M-GHO- C 26 61.4 95.9 760 7 CC042637 CC042237 UI-M-GHO- 27 61.4 95.9 760 7 CC042337 CC042237 UI-M-GHO- 28 59.8 93.4 45.4 6 BY597346 BY597346 BY597346 BY597346 BY597346 29 93.4 45.6 BBUG0826 BBUG0826 UI-M-DD2- 30 59.8 93.4 755 7 CN529567 CR52956 UI-M-DD2- 31 54.4 85.0 174 1 AIG08525 CR52956 UI-M-DD2- 32 53.4 85.0 174 1 AIG08525 CR52956 UI-M-DD2- 33 47.2 73.8 340 2 AW46744 AW46744 84843 MAR 34 47.2 73.8 340 2 AW46744 AW46744 84843 MAR 35 47.2 73.8 481 2 BE755989 BM090178 BR575598 209991 MA 36 47.2 73.8 513 4 BI774654 CCK953122 4092825 B 47 47.2 73.8 640 7 CK953122 CCK953080 CCK953080 4075226 B 47 46.2 72.2 548 1 AV604019 T99127 T99127 Y654460018 44 45.6 71.2 364 7 T99127 BM766498 K-EST0048 44 45.6 71.2 505 2 BE185069 BR185069 MRI-HT070	RESULT 1 AA925303/C LOCUS DEFINITION UI-R-A1-ek-e-09-0-UI.SI UI-R-A1 Rattus norvegicus CDNA clone UI-R-A1-ek-e-09-0-UI.SI UI-R-A1 Rattus norvegicus CDNA clone 622977 5', AA925303 VERSION AA925303.1 GI:4236494 KEYWORDS EST. AA925303.1 GI:4236494 KEYWORDS EST. ORGANISM Rattus norvegicus (Norway rat) ORGANISM Rattus norvegicus Eukaryota; Medezaca, Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodenia; Sciurognachi; Muridae; Murinae;	1, G. and Sc ibtraction: 791-806 (19 9 sequence ory for Com 156 MEBRF, 156 MEBRF, 156 MEBRF, 156 MEBRF,	Genetics This clone is also available through the T.M.A.G.E. Genetics This clone is also available through the T.M.A.G.E. Consortium at LLNL (info@image.llnl.gov). IMAGE ID=1771492 Seq primer: M13 Forward POLYA=No. Location/Qualifiers 1566 .organism="Rattus norvegicus" /mol_type="mRNA" /strafn="Sprague-Dawley" /db_xref="taxon:lol16" /clone="UT.R-Al-ek-e-09-0-UI" /dev stage="adult" /lab_host="MH10B (Life Technologies)"
GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd. OM nucleic - nucleic search, using sw model Run on: April 24, 2005, 07:21:49; Search time 1820 Seconds (without alignments) 1338.524 Million cell updates/sec Title: Perfect score: 64 Sequence: 1 tcatgacctcattttaggacttgttagctttttctctaga 64 Scoring table: IDENTITY_NUC Gapop 10-0, Gapext 1.0 Searched: 34239544 seqs, 19032134700 residues Total number of hits satisfying chosen parameters: 68479088	## Bed length: 0 ### Bed length: 2000000000 #### Bed length	Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being and is derived by analysis of the total score distribution. SUMMARIES Query Score Match Length DB ID 64 100.0 659 6 CA503893 64 100.0 659 6 CA503893 64 100.0 659 6 CB32784 64 100.0 683 6 CB32784 64 100.0 802 7 CO395194 64 100.0 802 7 CO395194 63 98.4 477 1 AA869795 63 98.4 546 5 BX516797 63 98.4 641 6 CA880144 63 98.4 641 6 CA880144 63 98.4 641 6 CA880186	98.4 1167 2 95.9 95.9 95.9 95.9 95.9 95.9 95.9 95

```
/notes "Vector: privile Pac (Pharmacia) with a modified polylinker; Site 1: Not 1; Site 2: Eco RI; The UI-R.Al library is a subfracted library derived from the UI-R.Al library. The UI-R.AO library consisted of a mixture of individually tagged normalized libraries constructed from rat placenta, adult lung, brain, liver, kidney, heart, spleen, ovary, and muscle. The tag is a string of 3-5 nucleotides present between the Not I site and the oligo-dr track which allows identification of the library of origin of a clone within the mixture. The subtracted library (UI-R.Al) was constructed as follows: PCR amplified cDNA inserts from a pool of approximately 3,840 UI-R.AO clones from which 3' ESTS had been derived was used as a driver in a hybridization with the UI-R.AO library in the form of single-stranded circles. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: bento-soares@ulowa.edu

The sequence contained an oligo-dT track that was present in the oligonuclectide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the cDNA between the NotI site and the oligo-dT track served to verify it as a clone from the normalized osteoblast library CDNA Library Preparation: M.B. Soares
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              remaining single-stranded circles (subtracted library) was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST 30-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     565 TCATGACCICATTITAGGACCAAGAGCTGTGTTGGTTTTTAGATTGTTAGCTTTTTTCTC 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UI-R-A1 library. This procedure has been previoualy described (Bonaldo, Lennon and Soares, Genome Research 6: 791-806, 1996)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lab Clone distribution: clones will be available through Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           purified by hydroxyapatite column chromatography, converted to double-granded circles and electroporated into DH10B bacterial (Life Technologies) to generate the UI-R-AI library. This procedure has been previously
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bonaldo,M.F., Lennon,G. and Soares,M.B. Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BO192706
UI-R-DR1-cla-d-11-0-UI.s1 UI-R-DR1 Rattus norvegicus CDNA clone
UI-R-DR1-cla-d-11-0-UI 3', mRNA sequence.
BO192706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TCATGACCTCATTTTAGGACCAAGAGCTGTGTTGGTTTCTTAGATTGTTAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 566;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 64; DB 1; Length burner. No. 2.1e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           th ... 100.0%; Score 64; DB Similarity 100.0%; Pred. No. 2.1. 64; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genetics (www.reagen.com)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BQ192706.1 GI:20368257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (bases 1 to 649)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 64; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      505 TAGA 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
BQ192706/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
```

g ઠે

```
/clone liber "ULTR-DRI" (Pharmacia) with a modified note="Wector: pT713D-Pac (Pharmacia) with a modified polylimker; Site 1: Not 1; Site 2: SCO R1; The UT-R-DRI library is a normalized Rat Osteoblast library (NED) constructed in pT3T7 vector according to the procedure described by Bonaldo, Lennon & Soares (Normalization and Subtraction: Two Approaches to Pacilitate Gene Discovery. Genome Research 6: 791-806, 1996). The Oligonucleotide used to prime first strand synthesis contained the sequence tag AAGATATCAA between the Not I cloning site and dT18 stretch. The Rat Osteoblast tissue was provided by Lian & Stein of the University of Massachussetts Medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CASO3893 659 bp mRNA linear EST 14-NOV-2002
UI-R-FJO-cpv-o-09-0-UI.81 UI-R-FJO Rattus norvegicus cDNA clone
UI-R-FJO-cpv-o-09-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             University of Iowa 155 MEBRF, Iowa City, IA 52242, USA Tel: 319 315 8250
Tel: 319 315 8250
Fax: 319 315 9565
Email: bento-soares@uiowa.edu
Tissue Procurement: Dr. James Lin, Universtiy of Iowa cDNA Library preparation: Dr. M. Bento Soares, University of Iowa CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bonaldo, M.F., Lennon, G. and Soares, M.B. Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                575 TCATGACCTCATTTTAGGACCAAGAGCTGTGTTTGTTTCTTAGATTGTTAGCTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TCATGACCTCATTTTAGGACCAAGAGCTGTGTTGGTTTCTTAGATTGTTAGCTTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                      /dev_stage="adult"
/lab_host="DH10B (Life Technologies)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 64; DB 5; I
100.0%; Pred. No. 2.1e-10;
iive 0; Mismatches 0;
                                                                                                                                                                                   /db_xref="taxon:10116"
/clone="UI-R-DR1-cla-d-11-0-UI"
                                                                                                           /organism="Rattus norvegicus'
                                                                                                                                      /mol_type="mRNA"
/strain="Sprague-Dawley"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAG_TISSUE=oeteoblast
TAG_LIB=UI-R-DR1
TAG_SEQ=AAGATATCAA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus (Norway rat)
                                                           Location/Qualifiers
Seg primer: M13 Forward POLYA-Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CA503893.1 GI:24994847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 659)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0
Matches 64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAGA 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 scovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CA503893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           515
                                                                                     Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
CA503893/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  510 TAGA 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C0395194
                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                         CB322784 Innear EST 11-AUG-2004
UI-R-DYO-crc-d-14-0-UI.81 NCI_CGAP_DYO Rattus norvegicus CDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Trcic 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bonaldo,M.F., Lennon,G. and Soares,M.B. Normalization and subtraction: two approaches to facilitate gene
Clone Distribution: Researchers may obtain clones from Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  569 rcardaccrcarrrragaccaagacrargrerregrrrcrragarrarra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 659;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TCATGACCTCATTTTAGGACCAAGAGCTGTGTTGGTTTCTTAGATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 64; DB 6; I
100.0%; Pred. No. 2.1e-10;
                                                                                                                                /db_xref="taxon:10116"
/clone="UI-R-FJO-cpv-o-09-0-UI"
/tissue_type="embryo"
                                                                                        organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH Bldg. 31 Rmioho? Betheeda, MD 20892 Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                  /mol_type="mRNA"
/strain="Sprague-Dawley"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMAGE:7329856 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                       and Tom Casavant)
TAG_TISSUE=rat-embryo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAG_LIB=UI-R-FJO
TAG_SEQ=CATCTCTACT"
                                                            .ocation/Qualifiers
                Genetics (www.resgen.com).
                              Seg primer: M13 FORWARD POLYA=Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CB322784.1 GI:28857442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 683)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 100.
Matches 64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              509 TAGA 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CB322784/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                          FEATURES
```

ð 셤

원

```
Oligo-dr track not found, Not I site shown in beginning of sequence is likely internal to the message. cDNA Library Preparation: M.B. Soares Lab Clone distribution: clones will be available through IMAGE (http://image.llnl.gov)
Seq primer: M13 FORWARD
POLYA-Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    570 reargacercarritaggaceaagacergerregrieerregarregriegragerritaere 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pT3T7 PAC vector according to the procedure described by Bonaldo, Lennon & Soares (Genome Research Genome 6: 791-806, 1996). The oligonucleotide used to prime first strand synthesis contained the sequence tag CTAATGGACG between the Not I cloning site and dT18 stretch. The Rat cartilage tissue was provided by Dr Jeff Stevens at the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       College of Wisconsin charaction: Express Genomics cDNA Library Preparation: Express Genomics and Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                               /dev stage="adult"
/lab host="DH10B (Life Technologies)"
/lab host="DH10B (Life Technologies)"
/lote="Vector: pT713D-pc"
polylinker; Site 1: Not 1; Site 2: Eco RI; UI-R-DY0 is non-normalized Rat cartilage library (RC) constructed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 TCATGACCTCATTTTAGGACCAAGAGCTGTTGGTTTCTTAGATTGTTAGCTTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Drs. Josef Lazar & Howard Jacob, Medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      802 bp mRNA linear BST 01-0
AGENCOURT 27849307 NIH MGC 252 Rattus norvegicus cDNA clone
IMAGE:7310479 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 64; DB 6; Length 683; 100.0%; Pred. No. 2.1e-10; ive 0; Mismatches 0; Indel8
                                                                                                                                                                                                                                                                      organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                       clone="IMAGE:7329856"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAG_LIBSUE-cartilage
TAG_LIB=UI-R-DYO
TAG_SEQ=CTAATGGACG"
                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      University of Iowa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CO395194.1 GI:49577110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 802)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64; Conservative
                                                                                                                                                                                                                                    . . 683
```

```
EST
                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 7
AA869795
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                   /clone lib="NIH MGC 252"
/clone lib="NIH MGC 252"
/clone lib="Nutl" NNA obtained from female overies animals at Site_2: Not!; NNA obtained from female overies animals at 8 wc old. Tissues were snap-frozen and kept at -80C for two days before RNA extraction and purification (Tri-reagent method). cDNA was primed using oligo-dT primer: 5'-pGACTAGATCGGGAGGGGCGCCC(T)25-3' and cloned into the EcoRV/Not! sites of pExpress-1.
Size-selection >1.25kb resulted in an average insert size of 17kb. This primary library is not normalized (normalized library is NIH MGC 252) and was constructed by Express Genomics (Frederick, MD). Note: this is a NIH_MGC
                                                                                                                                                      /db_xrefe="taxon:10116"
/clone="IMAGE:7310479"
/tissue_type="ovary, strain - Norway Line3. Age8 weeks.
/tissue was snap-frozen adn transferred in -70C. RNAse free
for the entire procedure"
/lab_host="DH10B TonA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BF555411 1.02-R-2000 UJ-R-A1 Rattus norvegicus cDNA clone UJ-R-A1-ek-e-09-0-UJ.; mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: benco-soarces@ulowa.edu

CDNA Library Preparation: M.B. Soarces Lab Clone distribution:

clones will be available through Research Genetics (www.resgen.com)

This clone is also available through the I.M.A.G.B. Consortium at

LINL (info@amage.linl.gov). IMAGE ID= 1771492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 TCATGACCTCATTTTAGGACCAAGAGCTGTGGTTTCTTAGATTGTTAGCTTTTTCTC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
University of Iowa
315 Newton Road , 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 802;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 64; DB 7; Length 80
100.0%; Pred. No. 2.2e-10;
ive 0; Mismatches 0; Indels

    .802
/organism="Rattus norvegicus"

                       column: 05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jenome Res. 6 (9), 791-806 (1996)
http://image.llnl.gov column:
Plate: LiAM15356 row: m column:
High quality sequence stop: 654.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                      mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BF555411.1 GI:11665141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 419)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches '64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   596 TAGA 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus.
                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                    PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BF555411
```

ORIGIN

셤

ઠે

윤

ò

```
/Actone_lbs_'(actor') pr_rall.
//Actore="Vector': pr_rall.
//Actore="Vector': pr_rall.
//Actore="Vector': pr_rall.
//Actore="Vector': pr_rall.
//Actore="Vector': pr_rall.
//Actore="Vector': pr_rall.
//Actore="Vector": pr_rall.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA869795 477 bp mRNA linear EST 16-MAR-1998 vq15h08.rl Barstead stromal cell line MPLRB8 Mus musculus CDNA clone IMAGE:1094367 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus. (Dases 1 to 477)

Marram, Hillier, Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         308 reargacercarrirangaceaagagergrerregrirerragarrerragerririrere 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           converted to double-stranded circles and electroporated into DH10B bacteria (Life Technologies) to generate the UTR-All library. This procedure has been previously described (Bonaldo, Lennon and Soares, Genome Research 6: 791-806, 1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       purified by hydroxyapatite column chromatography,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Context: Mark M.Mouse EST Project
WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 TCATGACCTCATTTTAGGACCAAGAGCTGTGTTGGTTTCTTAGATTGTTAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                         /clone="UI-R-Al-ek-e-09-0-UI" ",
/dev stage="adult"
/lab_host="DH10B (Life Technologies)"
/clone_lib="UI-R-Al"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98.4%; Score 63; DB 2; I 98.4%; Pred. No. 4.2e-10; iive 0; Mismatches 1;
                                                                                                organism="Rattus norvegicus"
                                                                                                                                         /mol_type="mRNA"
/strain="Sprague-Dawley"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Waterston, R.
The WashU-HHMI Mouse EST Project
Unpublished (1996)
                                                                                                                                                                                                                                               xref="taxon:10116"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AA869795.1 GI:2965240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 98.2.
Best Local Similarity 63; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     368 TAGA 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 TAGA 64
```

	GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.	_
OM nucleic - n	OM nucleic - nucleic search, using sw model	
Run on:	April 24, 2005, 07:21:03 , Search time 1738 Seconds (Without alignments) 1784.312 Million cell updates/sec	
Title:	US-10-663-418-71	

Title:

Perfect score;
64
Sequence:
1 tcatgacctcattttaggac.....ttgttagctttttctctaga 64
Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
Searched: 4708233 seqs, 24227607955 residues
Total number of hits satisfying chosen parameters: 9416466

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : GenEmbl:*

1: gb_ba:*
2: gb_htg:*
3: gb_om:*
4: gb_om:*
5: gb_ow:*
7: gb_ph:*
9: gb_ph:*
10: gb_pt:*
11: gb_ste:*
11: gb_ste:*
12: gb_sy:*
14: gb_wi:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTE

			Description	AC111774 Rattue no	BC060227 Mus miscil	BC065115 Mile milecia	AL671759 MOURE DIVE	AF070546 Homo gani	BV178942 acmm10325	BC065263 Homo gani	AKOSKIKI HOMO Sani		HOME				9.60						AR409320 Sequence
ES								•															
SUMMARIES				774	BC060227	BC065115	AL671759	546	BV178942	263	161	989	565	578	3946	3947	342	608	2215	533	685		3.60
S			£ :	AC111774	BC06	BC06	AL67	AF070546	BV17	BC065263	AK096161	BC029686	BC046565	BC080578	HSM80394	HSM803947	AR409342	AX23960B	HSDJ622L5	AR199533	AR374685		AK409320
				~	10	10	ព	6	11	σ	σ	ò	σ	ഹ	σ	σ	9	9	σ	9	v		0
			Match Length DB	245095	4702	4940	141790	1477	2710	2944	3049	3495	3554	4809	4880	5023	22255	22255	115756	4722	4722	47.7	77/5
	dР	Query	Match	100.0	95.9	95.9	95.9	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	64.7	64.7		
			Score	64	61.4	61.4	61.4	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	41.4	41.4	41.4	
		Result	No.	-	7	ო	Ω 4.	ഗ	y U	7	æ	a	10	11	. 12	13	14	15	16	17.	18	9	;
		ž	•				J		٠														

AX239571 Semience							Rattus				AC124567 Mus muscu	AL954355 Mouse DNA	AL135758 Mouse DNA	AC118154 Rattue no						AC113256 Rattus no					Ношо
						3																			
AX239571	BD056447	AR199536	AR374688	AR409323	AX239574	BD056450	AC120995	AC112571	AC118845	AL772138	AC124567	AL954355	AL135758	AC118154	AC121626	AC106583	BC077481	AC139387	AC099176	AC113256	CQ656202	AP002829	AC121175	AC018694	AC022888
9	9	9	9	9	9	٠	~	~	~	10	10	10	2	~	~	N	ß	~	N	~	9	σ	~	6	17
4722	4722	4697				4697	204697	236070	155580	229213	21:8924	133265	142667	216851	220407	233944	3742	170788	244536	334320	378	182389	183090	196832	208326
4.7	64.7	61.3	61.3	61.3	61.3	61.3	8.4	8.4	6.9	6.2	5.6	5.3	5.3	5.3	5.3	5.3	5.0	44.7	44.7	44.7	44.4	44.4	44.4	4.4	44.4
9			9	9	ø	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	44	4
41.4	41.4	39.5	39.2	39.5	39.5	39.5	31	31	30	29.6	29.5	29	29	29	29	29	28.8	28,6	28.6	28.6	28.4	28.4	28.4	28.4	28.4
20	7	22	23	24	22	56	23	28	53	30	31	35	33	34	32	36	37	38	39	40	41	42	43	44	42
								υ	U			υ	v	O			o	U	v	U	U			U	U
				•																					

ALIGNMENTS

HTG 09-NOV-2002 SEQUENCE, 10 Euteleostomi;	Alder,J., 'H., Benahmed,F., 'A., 'Z., Chu,J., 'Z., Chu,J., 'A., 'Z., Chu,J., 'A., 'Z., Chu,J., 'A., 'Z., Chu,J., 'A., 'A., 'A., 'A., 'A., 'A., 'A., 'A
linear G DRAFT C DRAFT G DRAFT	Adams, C Angulano, D Barnstead, M., Yth, P., Brown X., Calderon, E A., Calderon, C A., Can, C A., Can, C A., C
5 bp DNA 30-171G2, WOR T; HTGS_FULLT at) a; Craniata; a; Sciurognat	ke, S. Amin, A. Abramzon ke, S. Amin, A. A. Barber, M., enburg, K., Bl. Baroe, I., Ceas, G., Coyle, Cox, C., Coyle, Carroll, L., Ino, C., Ding, Y. Durb, A., Durb, A., Durb, A., Durb, A., Durb, A., Durb, A., Hong, Y. Garcia Ill, R., Grady amil, C., Hame, J. Hone, C., Hame, J. Hone, C., Kan, S. Khan, Z., Hume, J. Johnson, J. K., S. Khan, Z., Ion, S. L., Lorgad, H., Lorgad, R., Martin, R., Mahmoud, M., Mahmoud, M., Mahmoud, M., Mahmoud, M., Neill, T.Z., Neilll, T.Z., Neill, T.Z., Neill, T.Z., Neill, T.Z., Neill, T.Z., Neil
245095 bp us clone CH230-1 as. 24818709 11, HTCS DRAFT, HT us (Norway rat) us (Norway rat) ins zoa, Chordata, Ci	Metzker, M.L. Metzker, M.L. Metzker, M.L. Meyagi, A. D. Meyagi, A. D. Meyagi, A. D. Meter, C. Burch, B. Meter, C. Burch, C. Meter, C. Burch, C. Meter, Meter, Meter, C. Meter, C. Meter, Mete
AC111774 Rattus norvegicus clone CH230-171G2, WORKING DRAFT unordered pieces. Unordered pieces. AC111774 4 GI:24818709 HTG; HTGS_PHASE1; HTGS_DRAFT; HTGS_FULLTOP. Rattus norvegicus (Norway rat) Rattus norvegicus (Norway rat)	Muzny, D. Marie., Metzker, M.Lee., Abramzon, S., Adams, C., Alder, J., Alalro, H., Alabrooks, S., Amin, A., Anguiano, D., Allen, H., Alabrooks, S., Amin, A., Anguiano, D., Anguiano, D., Bandaranalke, D., Barber, M., Barse, Baden, H., Balatr, J., Blair, J., Blair, J., Blair, J., Blair, J., Barber, M., Barse, Baden, H., Bandaro, C., Barch, P., Burrell, K., Calderon, B., Cardens, V., Chavez, D., Chen, R., Bivth, P., Brown, M., Chenko, J., Chavez, D., Chen, R., Conle, M., Cree, A., D'Souza, L., Cardero, J., Chavez, D., Chen, R., Chen, R., Chen, Z., Chu, J., Claveto, J., Chavez, D., Chen, R., Coyle, M., Cree, Dederich, D., Davils, C., Dorson, S., Deramo, C., Ding, Y., Dinh, H., Divya, K., Drayer, H., Duya, R., Duran, C., Durbin, R., Duya, R., Becotto, M., Escotto, M., Escotto, M., Escotto, M., Gabis, A., Falls, T., Fan, G., Fernandez, S., Finley, M., Flagg, N., Forbes, L., Foster, M., Gabregoorgis, B., Garca, R., Handlton, C., Hamilton, K., Harvey, Y., Havlak, P., Handerson, N., Hernandez, J., Hernandez, R., Handla, M., Johnson, R., Liu, J., Liu, J., Liu, J., Liu, J., Liu, J., Liu, M., Liu, Y., London, P., Longacre, S., Lopez, R., Mahangam, B., Mahnola, M., Malhodarin, M., Mahnola, M., Malloy, K., Mandun, B., Mapua, P., Martin, R., Martin, R., Martin, R., Marhiney, S., Martin, R., Marhiney, S., Martin, R., Martin, R., Marhiney, S., Martin, R., Martin, R., Marhiney, S., Martin, R., Marhiney, S., Martin, R., Marhiney, S., Martin, R., Marhiney, S., Martin, R., Martin, R., Marhiney, S., Martin, R., Martin, R., Martin, R., Marhiney, S., Martin, R., Martin, R., Marhiney, S., Martin, R., Martin,
RESULT 1 AC111774 LOCUS DEFINITION ACCESSION YERYWORDS SOURCE CORGANISM E	REFERENCE AUTHORS A AUTHORS OF THE PERENCE OF THE P

be preserved

us-10-663-418-71.rge

```
ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
Morgan, Morris, K., Morris, S., Munidasa, M., Murphy, M., Nair, L., Nankervis, C., Naal, D., Newton, N., Nguyen, N., Norris, S., Nwaokelemeh, O., Okwuonu, G., Olarnpunsagoon, A., Pal, S., Parks, K., Pasternak, S., Paul, H., Perez, L., Peracz, L., Parankoch, C., Pantak, M., Perez, L., Perankoch, C., Plopper, F., Polndexter, A., Popovic, D., Primus, E., Pu, L.-L., Puszo, M., Culroz, J., Rachin, E., Revees, K., Regier, M., Reilly, B., Reilly, M., Ren, Y., Revees, K., Regier, M., Reilly, B., Reilly, M., Ren, Y., Rose, M., Rose, R., Riggs, F., Rives, C., Rodkey, T., Rojas, A., Rose, M., Rose, R., Ruiz, S.J., Shen, H., Shetty, J., Shvartsbeyn, A., Sisson, I., Sitter, C.D., Smajs, D., Sheety, J., Scherer, S., Sorelle, R., Sosa, J., Shed, M., Strong, R., Sutton, A., Svatek, A., Tabor, P., Taylor, T., Thomas, N., Thomas, S., Tingey, A., Trejos, Z., Usmani, K., Valas, R., Warsen, J., Walten, B., Wang, J., Wallasana, G., Williason, S., Warren, B., Waldron, L., Walker, B., Wang, J., Waright, D., Wright, R., Wool, Y., Yoon, L., Yoon, V., Vi, F., Zhang, J., Zhou, J., Zhou, S., Yen, J., Yoon, L., Yoon, V., Weinstock, G. and Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Light Submitted (109-NOV-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA ON 99, 2002 this sequence version replaced gi:23321701.

The sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas (http://www.hgsc.bcm.tmc.edu/projects/rat/). Each contig described in the feature table below represents a scaffold in the Atlas assembly (a 'contig-scaffold'). Within each contig-scaffold, individual sequence contigs are ordered and oriented, and separated by sized gaps filled with Ns to the estimated size. The sequence may extend beyond the ends of the clone and there may be sequence contigs within a contig-scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html). NOTE: This is a 'working draft' sequence. It currently consists of 10 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (19-FEB-2002) Human Genome Sequencing Center, Departmer of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA 3 (bases 1 to 245095)
Rat Genome Sequencing Consortium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          shotgun sequence only contigs will be indicated in the feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NOTE: Estimated insert size may differ from sequence length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ------ Genome Center
Center: Baylor College of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 245095)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Center code: BCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rect Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                npublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           orley, K.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
```

COMMENT

AUTHORS RPERENCE

as soon as it is available and the accession number will

```
148400 rcardaccecarritaggaccaagagcrergricerriceragarrerragarrerrated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BC060227 4702 bp mRNA linear ROD 12-OCT-2004
Mus musculus taxilin, mRNA (cDNA clone MGC:77972 IMAGE:30357541),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strausberg_R.L., Feingold, B.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D. Altschul, S.F., Zeeberg, B., Buetcw, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, F.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Haleh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleron, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.B., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 4702)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 245095;
                                                                                                                                                                              s; gap of unknown length
s: contig of 3540 bp in length
s: gap of unknown length
s: contig of 11229 bp in length
s: gap of unknown length
s: contig of 4277 bp in length
s: gap of unknown length
                               contig of 14658 bp in length
gap of unknown length
contig of 36066 bp in length
gap of unknown length
                                                                                                      gap of unknown length
contig of 54557 bp in length
                                                                                                                                                             contig of 45126 bp in length
gap of unknown length
3827 bp in length
                                                                                                                                                                                                                                                                                                                      3 245095: contig of 1153 bp in length.
Location/Qualifiers
                       ength
                                                                                                                                          unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 64; DB 2; I
100.0%; Pred. No. 6.3e-11;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TCATGACCTCATTTTAGGACCAAGAGCTGTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                          organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="CH230-171G2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 s_contig"
126005
    contig
                         gap of
                                                                                                                                                gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="wgs_contig"
116848. .118080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         contig"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'note="wgs_contig"
339566. .240945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="wgs_contig"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note="wgs_contig"
1432. .93819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BC060227.1 GI:38614270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .89924
                                                                                                                                                                                                                                                                                                             243942:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note="wgs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note="wg8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88548.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91432.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           148460 TAGA 148463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus
                                                                                                                                                                                                                                                                                                           243843 243943
                       13690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 TAGA 64
                                                                                                                                                                                        2449,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                           Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 2
BC060227
                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
```

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

April 24, 2005, 07:20:29; Search time 266 Seconds (without alignments) 1424.299 Million cell updates/sec Run on:

US-10-663-418-71 ritle:

Perfect acore:

1 tcatgacctcattttaggac.....ttgttagctttttctctaga 64 Sequence:

Scoring table:

IDENTITY NUC Gapop 10.0 , Gapext 1.0

Total number of hits satisfying chosen parameters: 4390206 segs, 2959870667 residues Searched:

8780412

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

geneseqn2003ds: geneseqn2004as:* N Geneseq 16Dec04: geneseqn2003bs: geneseqn2000s: geneseqn2002as geneseqn2002bs geneseqn2001bs geneseqn2003as genesedn1980s: geneseqn1990s: Database:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

genesegn2004bs:

					•																
	Description	Abk35029 Human cDN	Adp54990 Human PRO	Acc46153 Human dit	Acc46130 Human dit			Aav32836 Rabbit lo	Aah26491 Rabbit lo	Aav32839 Human low	Aah26496 Human low	Add52076 Novel can	Aat23888 Human gen	Abx66285 Helicobac	Abx65642 Helicobac	Abx66280 Helicobac	Aax14487 H. pylori	Abz10086 Haematopo	Acn87401 Breast ca	Abq70768 Listeria	Lomod ANG ROLL
) ! !																			
SUMMARIES	£	ABK35029	ADP54990	ACC46153	ACC46130	AAH26497	ACD13448	AAV32836	AAH26491	AAV32839	AAH26496	ADQ52076	AAT23888	ABX66285	ABX65642	ABX66280	AAX14487	ABZ10086	ACN87401	ABQ70768	ADM91308
	B	9	2	ထ	8	'n	۵	~	Ŋ	N	Ŋ	13	~	ø	ø	φ	~	8	7	9	2
	% Query Match Length DB	1926	2145	5085	6577	22255	115756	4722	4722	4697	4697	635	268	1024	1024	1024	1035	6325	569	2418	2875
	* Query Match	71.2	71.2	71.2	71.2	71.2	71.2	64.7	64.7	61.3	61.3	59.4	52.5	42.5	42.5	42.5	42.5	42.5	41.2	41.2	.41.2
	Score	45.6	45.6	45.6	45.6	45.6	45.6	41.4	41.4	39.2	39.2	38	33.6	27.2	27.2	27.2	27.2	27.2	26.4	26.4	26.4
	Result No.		0	М	4	ú	ø	. 7	α ο	6.	10	11	12	13	14	15	16	17	.c	c 19	20

Adq97464 Mouse can	Continuation (22 o	Aat32583 Alfalfa i	Abk15038 Canine di	Abk15000 Canine di	Abk15039 Canine di	4 Abk42608 Genomic s	Adb60764 Connectiv	Ada02567 Mouse Gat	Adb72305 Mouse Gat	Ade95815 Mouse Gat	Aas46748 Tumour su	Adl13825 Osteoarth	Abd32548 Human can	Adb63505 Human cDN	Abz10232 Haematopo	Continuation (6 of	Adg97240 Mouse can	Abd33020 Mouse can	Aak83205 Human 1mm	Abl38563 Human col				
ADQ97464	ABA03041 21	AAT32583	ABK15038	ABK15000	ABK15039	ABK42608	ADB60764	ADA02567	ADB72305	ADE95815	AAS46748	ADL13825	ABD32548	ADB63505	ABZ10232	AAK95240 05	AAK96733 05	ABT00010 05	ABT01503 05	ADH77486 05	ADQ97240	ABD33020	AAK83205	ABL38563
12	9	~	9	9	9	4	σ	σ	10	10	4	10	13	10	æ	4	4	9	9	12	12	13	4	ø
25800	110000	2730	15690	15690	18826	16825	16825	. 23243	23243	23243	26997	192427	310268	1754	6325	110000	110000	110000	110000	110000	28449	256294	275	427
1.2	1.2	6.0	40.9	40.9	40.9	40.3	0.3	6.0	40.3	40.3	40.3	40.3	40.3	40.0	40.0	40.0	40.0	40.0	40.0	40:0	39.7	7.6	4.6	9.4
4	4	4	4	4,	4	4	4	4	4	4	4,	4.	4	4	4	4	4.	4	4	4	m	'n	'n	'n
4.	26.4	26.2	6.2	.2	.5	8	8.	8.	8	8.	8	89	25.8	25.6	2.6	9.	9.	9.	9.	9.	4.	4.	7	7
7	ñ	5	ñ	5	ř	23	2	2	2	2	2	2	2	2	2	2	2	22	2	2	2	2	2	2
21.	22	23	24	.25	56	27	28	53	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
υ	υ	Ò										Ü		υ		υ	U	υ	O.	O	υ		υ	

ALIGNMENTS

Human cDNA encoding secreted protein #167. ABK35029 standard; cDNA; 1926 BP. (first entry) 08-MAY-2002 ABK35029; RESULT

t; haemophilia; diabetes; asthma; autoimmune thyroiditis; allergic reaction; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; liver fibrosis; cancer; ulcer; coaqulation diseorder; inflammatory disorder; Crohn's disease; incision; tissue regeneration; wound healing; burn; haematopoiesis; myeloid cell deficiency; lymphoid cell deficiency. autoimmune disorder; rheumatoid arthritis; multiple sclerosis; tumour; supplement; gene; ss; nutritional Human; secreted protein; viral infection; bacteris

Ношо варіепв.

WO200177288-A2.

18-OCT-2001.

29-MAR-2001; 2001WO-US010224.

06-APR-2000; 2000US-0195582P.

(GEMY) GENETICS INST INC.

Clark HF, Fechtel K, Agostino MJ, Howes SH, Resnick RJ; K, Graham JR; Wong GG, Cla Gulukota K,

WPI; 2002-179321/23.

Five hundred and ninety two polynucleotides derived from a variety of human tissue sources which encode secreted proteins, useful for treating immune deficiencies and disorders such as autoimmune disorders.

Claim 1; Page 152; 372pp; English.

The invention relates to 592 polynucleotides which have been derived from

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , Appli
158019
                                                                                             (without alignments)
1079.605 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14589,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16150,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5692,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
                                                                                                                                                                tcatgacctcattttaggac......ttgttagctttttctctaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence
                                                                                April 24, 2005, 07:25:03 ; Search time 97 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                     /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-616-289-51

US-09-517-849-14

US-09-517-849-14

US-08-979-60BA-17

US-09-517-849-17

US-09-949-016-171883

US-09-949-016-171884

US-09-949-016-171884

US-09-949-016-171884

US-09-949-016-1868

US-09-949-016-1868

US-09-949-016-1868

US-09-949-016-14589

US-09-949-016-158019

US-09-949-016-158019

US-09-949-016-158019

US-09-949-016-158019

US-09-949-016-158019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-949-016-15693
US-09-949-016-124839
US-09-949-016-124840
                                                                                                                                                                                                                                                              of hits satisfying chosen parameters:
                                                                                                                                                                                                                                  1202784 seqs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                Minimum Match O%
Maximum Match 100%
Listing first 45 summaries
                                                     nucleic search, using sw model
                                                                                                                                                                                          IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                         Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                         length: 0
length: 2000000000
                                                                                                                                    US-10-663-418-71
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
156942
156950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36620
87352
87352
87352
87352
601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     308362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        232547
            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
                                                                                                                                                                                                                                                                                                                                   Post-processing:
                                                                                                                                                                                                                                                                                        Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acore:
                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                              Total number
                                                     nucleic
                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                  Perfect
                                                                                                                                    Title:
                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Result
No.
                                                     δ
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lees, Ann M.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Ann M.
APPLICANT: Lees, Annon W.
APPLICANT: Ariona, Anthenal A.
TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN BINDING
TITLE OF INVENTION: ATHEROSCLEROSIS
TITLE OF INVENTION NUMBER: US/09/616,289
CURRENT FILING DATE: 2000-07-14
RRIOR FILING DATE: 1997-01-26
PRIOR FILING DATE: 1997-11-26
PRIOR FILING DATE: 1997-11-26
PRIOR FILING DATE: 1997-06-03
NUMBER OF SEQ ID NOS: 53
NUMBER OF SEQ ID NOS: 53
NUMBER OF SEQ ID NOS: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
Sequence
Sequence
                                                                                Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 45.6; DB 4; Length 22255;
Pred. No. 7.6e-06;
0; Mismatches 4; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTTTCTTAGATTGTTAGCTTTTTCTCTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Arjona, Anibal A.
TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN
                                              US-09-949-016-17392
US-10-027-983-11
US-09-949-016-130194
US-09-949-016-154194
US-09-949-016-24772
US-09-949-016-24774
US-09-949-016-35142
                                                                                                                                                                                                                                                              US-09-949-016-173472
US-09-949-016-173473
                              1-09-949-016-12583
                                                                                                                                                                              US-09-949-016-35143
US-09-949-016-35144
US-09-949-016-35171
                                                                                                                                                                                                                               US-09-949-016-35172
                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 14, Application US/08979608A Patent No. 6355451 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 51, Application US/09616289
Patent No. 6632923
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lees, Ann M.
Lees, Robert S.
Law, Simon W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 92.3%;
Matches 48; Conservative
                             254964
254964
392000
601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
US-09-616-289-51
                                  US-08-979-608A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19382
```

aquence 17,
Sequence 17, App.
--muence 17, Appl

17 US-10-671-242-14 9 US-09-962-05-17 9 US-09-976-740-17 13 US-10-023-529-17 17 US-10-66-187-17 17 US-10-66-187-17 17 US-10-671-242-12 17 US-10-671-242-12 17 US-10-982-227-401 18 US-09-882-227-401 18 US-10-473-126-226

Sequence 17, Appl Sequence 17, Appl Sequence 11, Appl Sequence 1128, Ap Sequence 128, Ap Sequence 226, Appl Sequence 226, Appl Sequence 2, Appl

8551, Ap 171545,

Sequence 152420, Sequence 8551, Ag Sequence 171545,

Sequence

Sequence 267996, Sequence 267997, Sequence 267996, Sequence 267997,

Sequence Sequence Sequence Sequence Sequence Sequence

US-10-027-632-152420 US-10-027-632-152420 US-10-027-632-152420 US-10-027-632-171545 US-10-027-632-171545 US-10-027-632-171545 US-10-027-632-7733 US-10-027-632-7734 US-10-027-632-7734 US-10-027-632-7734 US-10-027-632-7735 US-10-027-632-267996 US-10-027-632-267996 US-10-027-632-267997 US-10-027-632-267996 US-10-027-632-267997 US-10-027-632-267997

Sequence 1495, Ap Sequence 1495, Ap Sequence 73, App.

Sequence 3 Sequence 1 Sequence 1

US-10-092-154-1495 US-10-052-482-73 US-10-221-714A-474 US-10-428-487-11

ALIGNMENTS

```
Sequence 167, App
Sequence 51, Appl
                                                                                                                                                             April 24, 2005, 07:58:43; Search time 300 Seconds (without alignments) 1295.158 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                          64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Description
                                                                                                                                                                                                                                                                                                                     1 tcatgacctcattttaggac.....ttgttagctttttctctaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Published Applications NA:*

1: \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} \) \( \text{VBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} \) \( \text{VBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} \) \( \text{VBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{VBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{VBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{PUBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{PUBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{PUBCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{FURCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{FURCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{FURCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{FURCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{FURCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{FURCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{FURCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \text{fordata} / 1 \) \( \text{pubma} / \text{VBO} \) \( \text{FURCOMB} \) \( \text{seq:*} \) \( \text{cgn2} \) \( \te
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cgm2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
/cgm2_6/ptodata/1/pubpna/US60_PUBGOMB.seq:*
               GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-976-740-51
US-10-023-529-51
US-10-023-523-51
US-10-616-187-51
US-10-671-242-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                5633728 segs, 3035525691 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                 Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0 Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                    US-10-663-418-71
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length DB
                                                                                                                                                                                                                                                                                                                                                                         IDENTITY NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number
                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                  Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Result
```

ö APPLICANT: Agostino, Michael J.
APPLICANT: Agostino, Michael J.
APPLICANT: Remairck, Richard J.
APPLICANT: Remairck, Richard J.
APPLICANT: Raminick, Richard J.
APPLICANT: Graham, James R.
APPLICANT: Graham, James R.
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING NOVEL SECRETED PROTEINS
FILE REFERENCE: GIN 6403
CURRENT APPLICATION NUMBER: US/09/622,849A
CURRENT APPLICATION NUMBER: 60/195,582
PRIOR APPLICATION NUMBER: 60/195,582
PRIOR PRILNG DATE: 2000-04-06
NUMBER OF SEQ ID NOS: 598
SOOT NO 167
LENGTH: 1926 Gaps ö TITIAGGACCAAGAGCIGIGITGGTITCTIAGATIGITAGCTITITCTCTAG Score 45.6; DB 9; Length 1926; Pred. No. 1e-05; 0; Mismatches 4; Indels 0 Sequence 167, Application US/09822849A Patent No. US20020045170A1 71.2%; Query Match 71.2 Best Local Similarity 92.3 Matches 48; Conservative GENERAL INFORMATION:
APPLICANT: Wong, Gordon G.
APPLICANT: Clark, Hilary
APPLICANT: Fechtel, Kim ; TYPE: DNA ; ORGANISM: Homo sapiens US-09-822-849A-167 12 ò

Sequence 51, P Sequence 14, P Sequence 14, P Sequence 14, Sequence 14, Sequence 14,

US-10-023-529-14 US-10-023-523-14 US-10-616-187-14

US-09-962-055-14 US-09-976-740-14

Sequence 51, Sequence 51, Sequence 51,

Sequence:

е ::

Run

Searched:

Minimum Maximum

Database

Result

```
Email: benco-soares@ulowa.edu

The sequence tag present in the cDNA between the NotI site and the oligo-dT track served to identify it as a clone from the normalized adult Muscle library. cDNA Library Preparation: M. Patima Bonaldo, Ph.D. Clone distribution: clones will be available through Research Generics This clone is also available through the I.M.A.G.E.

CONSORTIUM at LIMI (info@image.llnl.gov). INAGE ID=1771492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA25303

1. T-A1-ek-e-09-0-UI.sl Ul-R-A1 Rattus norvegicus CDNA clone
UI-R-A1-ek-e-09-0-UI 3' similar to gi|1768059|gb|AA18410|AA18410

ME34f05.rl Soares mouse 3NDMS Mus musculus CDNA clone 622977 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            On Apr 21, 1998 this sequence version replaced gi:3072439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  University of Iowa 375 Newton Road , 4156 MEBRF, Iowa City, IA 52242, TE1: 319 335 9250 Fax: 319 335 9565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="UI-R-A1-ek-e-09-0-UI"
/dev_stage="adult"
/lab_host="DH10B (Life Technologies)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .566
/organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               discovery
Genome Res. 6 (9), 791-806 (1996)
97044477
                                                                                              CN529567
A1608525
BG867325
AW487474
                                                                                                                                                                           AW446148
BE755989
BM090178
B1774054
CK953122
CK950080
CK953458
                                                                                                                                                                                                                                                                                                                                                   BM766498
BM689900
BE185069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer: M13 Forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:4236494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        266)
                                                                                                                                                                                                                                  513
640
667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to
Bonaldo, M.F., L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA925303.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seg primer
POLYA=No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus.
                                        61.4
533.4
533.4
73.7
                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
AA925303/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
April 24, 2005, 07:21:49 ; Search time 1820 Seconds (without alignments) 1338.524 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus muscu
BY710509
UI-M-PY0-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ms87e12.r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGENCOUR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UI-M-GHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                  64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                                                                                                                                        tcatgacctcattttaggac.....ttgttagctttttctctaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA925303
BQ192706
CA503893
CB322784
CO395194
BP555411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA869795 AA869795 CA880144 CCA880144 CCB208956 BF180039 AA170252 AA170252 CA450819 CCF727202 UCA86179 CCF727202 UCA8619 UCA86119 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AK011182 PBY710509 CA324014 U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BQ176939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP761959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CO042840
                                                                                                                                                                                                                                                                                                                                                                                   68479088
          GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                      34239544 Begs, 19032134700 residues
                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                              nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY710509
CA324014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CA880144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CB208950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BF180039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CO395194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA869795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA170252
                                                                                                                                                                                                                                                                            IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA915373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum Match 0%
Maximum Match 100%
Listing first 45 su
                                                                                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 200000000
                                                                                                                                                                                                 US-10-663-418-71
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            est1:*
                      Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gb est4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gb_gss1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               641
1009
1167
519
540
647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing:
                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                   Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61.4
61.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                 0B
0B
```

04-JUL-1999

gene

USA

AV604019 AV604019 T99127, ye62408 r1 BM766498 K-EST0048 BM689900 UI-B-CK1-BE185069 MRI-HT070

B1774054 466018 MA CK953122 4092825 B CK950080 4075226 B CK953458 4093209 B

209991 MA 505329 MA 466018 MA

MAR MAR 602788676

BY597346 BU609826 CN529567 AI608525 BG867325

84459 84843

AW487474 AW446148 BE755989 BM090178

```
//octe=TVector: prilibrate (Pharmacia) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; The UI-R-Al library is a subtracted library derived from the UI-R-Al library is a subtracted library econsisted of a mixture of individually taged normalized libraries constructed from rat placenta, adult lung, brain, liver, kidney, heart, spleen, ovary, and muscle. The tag is a string of 3-5 nucleotides present between the Not I site and the oligo-dr track which allows identification of the library of origin of a clone within the mixture. The subtracted library (UI-R-Al) was constructed as follows: PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequence contained an oligo-dr track that was present in the oligonucleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the cDNA between the NotI site and the oligo-dr track served to verify it as a clone from the normalized osteoblast library cDNA Library Preparation: M.B. Soares Lab Clone distribution: clones will be available through Research
                                                                                                                                                                                                                                                                                                                                                                                   amplified cDNA inserts from a pool of approximately 3,840 UI-R-AO clones from which 3' ESTS had been derived was UI-R-AO clones from which 3' ESTS had been derived was used as a driver in a hybridization with the UI-R-AO library in the form of single-stranded circles. The remaining single-stranded circles (subtracted library) was purified by hydroxyapatite column chromatography, converted to double-stranded circles and electroporated into DH10B bacteria (Life Technologies) to generate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST 30-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rcardaccrcarrradgaccaagagcrgrgrrggrrictragarrgrradgacrrrrrcrc 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UI-R-A1 library. This procedure has been previously described (Bonaldo, Lennon and Soares, Genome Research 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 TCATGACCTCATITITAGGACCAAGAGCTGTTGGTTTCTTAGATTGTTAGCTTTTTCTC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           [ (bases 1 to 649) Soares, M.B. Soares, M.B. Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BQ192706
UI-R-DR1-cla-d-11-0-UI.sl UI-R-DR1 Rattus norvegicus CDNA clone
UI-R-DR1-cla-d-11-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           niversity of Iowa
175 Newton Road , 4156 MEBRF, Iowa City, IA 52242, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 566;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
100.0%; Score 64; DB 1; Length 56
Best Local Similarity 100.0%; Pred. No. 2.1e-10;
Matches 64; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     enome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ?mail: bento-soares@uiowa.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genetics (www.resgen.com)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           791-806, 1996)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3Q192706.1 GI:20368257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGA 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BQ192706/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
```

RESULT

셤 ઠે

ठ

ORIGIN

```
/dev. stage="adult"
//lab_host="adult"
//lab_host="adult"
//lab_host="adult"
//lab_host="DH10B [Life Technologies]"
//clone lib="uu-R-DR1"
//note="Vector: pT713D-Pac (Pharmacia) with a modified
//note="Vector: pT713D-Pac (Pharmacia) with a modified
//note="Vector: pT713D-Pac (Pharmacia) with a modified
polylinker; Site 1: Not I; Site 2: ECO RI; The UI-R-DR1
library is a normalized Rat Osteoblast library (nREO)
constructed in pT3T7 vector according to the procedure
described by Bonaldo, Lennon & Soares (Normalization and
Subtraction: Two Approaches to Facilitate Gene Discovery
Genome Research 6: 791-806, 1996). The oligonucleotide
used to prime first strand synthesis contained the
sequence tag AnGATATCAA between the Not I cloning site and
dT18 streetch. The Rat Osteoblast Lissue was provided by
Lian & Stein of the University of Massachussette Medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST 14-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: bento-scares@ulowa.edu
Tissue Procurement: Dr. James Lin, Universtiy of Iowa
CDN Library preparation: Dr. W. Bento Scares, University of Iowa
CDN Library Arrayed by: Dr. M. Bento Scares, University of Iowa
DNA Sequencing by: Dr. M. Bento Scares, University of Iowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota, Mecazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 659)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CASO3893
UI-R-FJO-CDV-O-09-0-UI.81 UI-R-FJO RATTUS NOIVEGICUS CDNA Clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          575 ichicaccicatritradcaccaagacrererideiricringaricriagciritrere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               University of Iowa 375 Newton Road , 4156 MEBRF, Iowa City, IA 52242, USA Tel: 319 335 9256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.0%; Pred. No. 2.1e-10;
Matches 64; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 TCATGACCTCATTTTAGGACCAAGAGCTGTGTTGGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UI-R-FJO-cpv-o-09-0-UI 3', mRNA sequence.
                                                                                                                                                                                  'db_xref="taxon:10116"
'clone="UI-R-DR1-cla-d-11-0-UI"
                                                                                                   organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome Res. 6 (9), 791-806 (1996)
97044477
                                                                                                                                                    strain="Sprague-Dawley"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAG_LIBSUE=osteoblast
TAG_LIB=UI-R-DR1
TAG_SEQ=AAGATATCAA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus (Norway rat)
                                                location/Qualifiers
                                                                                                                            type="mRNA'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GI:24994847
Seg primer: M13 Forward
POLYA=Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CA503893.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        515 TAGA 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CA503893/c
                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
/mol type="mcNA"
// dev status mol veglous ...
// dev status ...
// dev state="mcNA"
// clone="Ull-R-FU0-cpv0-09-0-Ul"
// tissue_type="embryo"
// dev stage="embryo"
// dev stage="bullous (Life Technologies) (T1 phage resistant) ...
// clone_lib="Ul-R-FU0"
// note="vector: pXY-Asc; Site 1: BCoR I; Site 2: Not I;
// note="vector: pXY-Asc; Site 1: BCoR I; Site 2: Not I;
// note="vector: pXy-Asc; Site 1: BCoR I; Site 2: Not I;
// note="vector: pXy-Asc; Site 1: BCoR I; Site 2: Not I;
// ul-R-FU0 is a cDNA library containing the following
tissue(s): rat embryo. The library was constructed
according to Bonaldo, Lennon and Soares, Genome Research,
6:791-806, 1996. First strand cDNA synthesis was primed
with an oligo-dT primer containing a Not I site. Double
stranded cDNA was ligated to an EcoR I adaptor, digested
with Not I; and cloned directionally into pT773-Pac
vector: The oligomucleotide used to prime the synthesis of
first-strand cDNA contains a library tag sequence that is
located between the Not I site and the (dT)18 tail. The
sequence tag for the University of lowa Program for Rat
Gene Discovery and Mapping (Val Sheffield, Bento Soares
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             683 bp mRNA linear BST 11-AUG-2004 UI-R-DYO-crc-d-14-0-UI.81 NCI CGAP_DYO Rattus norvegicus CDNA clone CB322784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   569 TCATGACCTCATTTTAGGACCAAGAGCTGTGTTTGTTTCTTAGATTGTTAGCTTTTTTCTC 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
Clone Distribution: Researchers may obtain clones from Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 683)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 64; DB 6; Length 659; 100.0%; Pred. No. 2.1e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                      organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Daniela S. Gerhard, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and Tom Casavant)
TAG_TISSUE=rat-embryo
TAG_LIB=UI-R-FJ0
TAG_SEQ=CATCTCTACT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Norway rat)
                                                                                                                    location/Qualifiers
                                  Genetics (www.resgen.com).
Seg primer: M13 FORWARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CB322784.1 GI:28857442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAGA 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 4
CB322784/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE
PUBMED
COMMENT
                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
```

ORIGIN

8 쉱

a

```
Oligo-dr track not found, Not I site shown in beginning of sequence is likely internal to the message. cDNA Library Preparation: M.B. Soares Lab Clone distribution: clones will be available through IMAGE (http://image.linl.gov)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST 01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dupublished (1999)
Contact: Daniela S. Gerhard, Ph.D.
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Betheada, MD 20892
Email: cgapbs-romail.nih.gov
Tissue Procurement: Drs. Josef Lazar & Howard Jacob, Medical
College of Wisconsin
CDNA Library Preparation: Express Genomics
CDNA Library Preparation: Express Genomics
CDNA Library Agencourt Bioscience Corporation
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MCC clone distribution information can be found through the I.M.A.G.E. Consortium/LIAN at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /dev stage="adult"
/lab_host="DH10B (Life Technologies)"
/lab_host="DH10B (Life Technologies)"
/clone llb="NCI_CGAP_DY0"
/note="Vector: TiT3D-PP of DP of DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pT3T7 PAC vector according to the procedure described by Bonaldo, Lennon & Soares (Genome Research Genome 6: 791-806, 1996). The oligonucleotide used to prime first strand synthesis contained the sequence tag CTAATGGACG between the Not I cloning site and dT18 stretch. The Rat cartilage tissue was provided by Dr Jeff Stevens at the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 802)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CO395194 B02 bp mRNA linear EST 01-.
AGENCOURT 27849307 NIH MGC 252 Rattus norvegicus cDNA clone
IMAGE:7310479 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
100.0%; Score 64; DB 6; L
Best Local Similarity 100.0%; Pred. No. 2.1e-10;
Matches 64; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                               organisme"Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/strain="Sprague-Dawley"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="taxon:10116"
/clone="IMAGB:7329856"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           University of Iowa.
TAG_TISSUE=cartilage
                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAG_LIB=UI-R-DY0
TAG_SEQ=CTAATGGACG"
                                                                                                                                                                                     Seg primer: M13 FORWARD POLYA-Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CO395194.1 GI:49577110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    510 TAGA 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 TAGA 64
                                                                                                                                                                                                                                                                                                                                        Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 5
CO395194
                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     名
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                           for the entire procedure... Control of the control 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    University of lowa
University of lowa
University of lowa
University of lowa
Tel: 319 338 9250
Fax: 319 335 9565
Email: bento-soarse@ulowa.edu
cDNA Library Preparation: M.B. Soarse Lab Clone distribution:
clones will be available through Research Genetics (www.resgen.com)
This clone is also available through the I.M.A.G.E. Consortium at
LLNL (Info@nage.llnl.gov). IMAGE ID= 1771492
                                                                                                                                                                                                                                                                                                                           'tissue_type="Ovary, strain - Norway Line3. Age8 weeks.
'issue was snap-frozen adn transferred in -70C. RNAse free
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 12-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       536 TCATGACCTCATTTTAGGACCAAGAGCTGTTGGTTTCTTAGATTGTTAGCTTTTTCTC 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BF555411
UI-R-A1-ek-e-09-0-UI.rl UI-R-A1 Rattus norvegicus cDNA clone
UI-R-A1-ek-e-09-0-UI 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 64; DB 7; Length 802; 100.0%; Pred. No. 2.2e-10; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                  organism="Rattus norvegicus"
http://image.llnl.gov
Plate: LLAM15356 row: m column: 05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genome Res. 6 (9), 791-806 (1996)
                                                                    High quality sequence stop: 654.
Location/Qualifiers
                                                                                                                                                                                                                    /mol_type="mRNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                            clone="IMAGE:7310479"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BF555411.1 GI:11665141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 419)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Soares, MB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 64; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   596 TAGA 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 TAGA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus
                                                                                                                                                Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
BF555411
                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
```

요 8

```
/dlone lib="UI-R. All"
//olone lib="UI-R. All"
//olone lib="UI-R. All"
//olone lib="UI-R. All"
//oce="Vector: pT7T3D-Pac (Pharmacia) with a modified
polylinker; Site l: Not I; Site 2: Sco Ri; The UI-R-Al
library is a subtracted library derived from the UI-R-Al
library. The UI-R-AD library consisted of a mixture of
individually tagged normalized libraries constructed from
rat placenta, adult lung, brain, liver, kidney, heart,
spleen, ovary, and muscle. The tag is a string of 3-5
nucleotides present between the Not I site and the
oligo-dT track which allows identification of the library
of origin of a clone within the mixture. The subtracted
library (UI-R-Al) was constructed as follows: PCR
amplified cDNA inserts from a pool of approximately 3,840
UI-R-AD clones from which 3: ESTS had been derived was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 remaining single-stranded circles (subtracted library) was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 477)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,
Gelsel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Sreptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UI-R-A1 library. This procedure has been previously described (Bonaldo, Lennon and Soares, Genome Research 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            308 reargacercarritandaceaagacergrerregriretragarrerrageerritatie 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       purified by hydroxyapatite column chromatography, converted to double-stranded circles and electroporated into DH10B bacteria (Life Technologies) to generate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA869795 477 bp mRNA linear EST 16-MAR. vq15h08.rl Barstead stromal cell line MPLRB8 Mus musculus cDNA clone IMAGE:1094367 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; . Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       used as a driver in a hybridization with the UI-R-AO library in the form of single-stranded circles. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 63; DB 2; Length 419;
Pred. No. 4.2e-10;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                      'dev_stage="adult"
|lab_host="DH10B (Life Technologies)"
                                                                                                                                                                                                                   clone="UI-R-A1-ek-e-09-0-UI"
                                                                         organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
                                                                                                                                          strain="Sprague-Dawley"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The WashU-HHMI Mouse EST Project
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA869795.1 GI:2965240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 98.4<sup>1</sup>
Matches 63, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              368 TAGA 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 TAGA 64
```